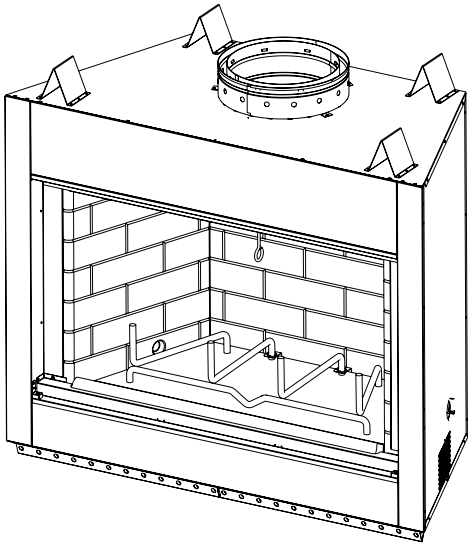
HEAT&GLO
*LifeStyle*Collection™

Owner's Manual

Installation and Operation

Models:
Montana-36
Montana-42
Woodburning Fireplace



UL® LISTED

CAUTION

DO NOT DISCARD

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

⚠WARNING

If the information in these instructions is not followed exactly, a fire may result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

⚠WARNING

HOT! DO NOT TOUCH.
SEVERE BURNS MAY RESULT.
CLOTHING IGNITION MAY RESULT.

Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.
- Keep clothing, furniture, draperies and other combustibles away.

Installation and service of this fireplace should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory-trained professionals, or technicians supervised by an NFI certified professional.

Wood Energy Technical Training

⚠WARNING

Fire Risk

- For use with solid wood fuel or decorative gas appliance only.
- Do not install unvented gas logs.

Read this manual before installing or operating this fireplace.
Please retain this owner's manual for future reference.

Congratulations!

Congratulations on selecting a Heat & Glo LifeStyles Collection wood burning fireplace. The Heat & Glo LifeStyles Collection fireplace you have selected is designed to provide the utmost in safety, reliability and efficiency.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest you keep it with your other important documents and product manuals.

The information contained in this owner's manual unless noted otherwise, applies to all models and gas control systems.

Your new Heat & Glo LifeStyles Collection wood burning fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Heat & Glo LifeStyles Collection family of fireplace products!

Homeowner Reference Information

We recommend that you record the following pertinent information about your fireplace:

Model Name: _____ Date purchased/installed: _____

Serial Number: _____ Location on fireplace: _____

Dealership purchased from: _____ Dealer phone: _____

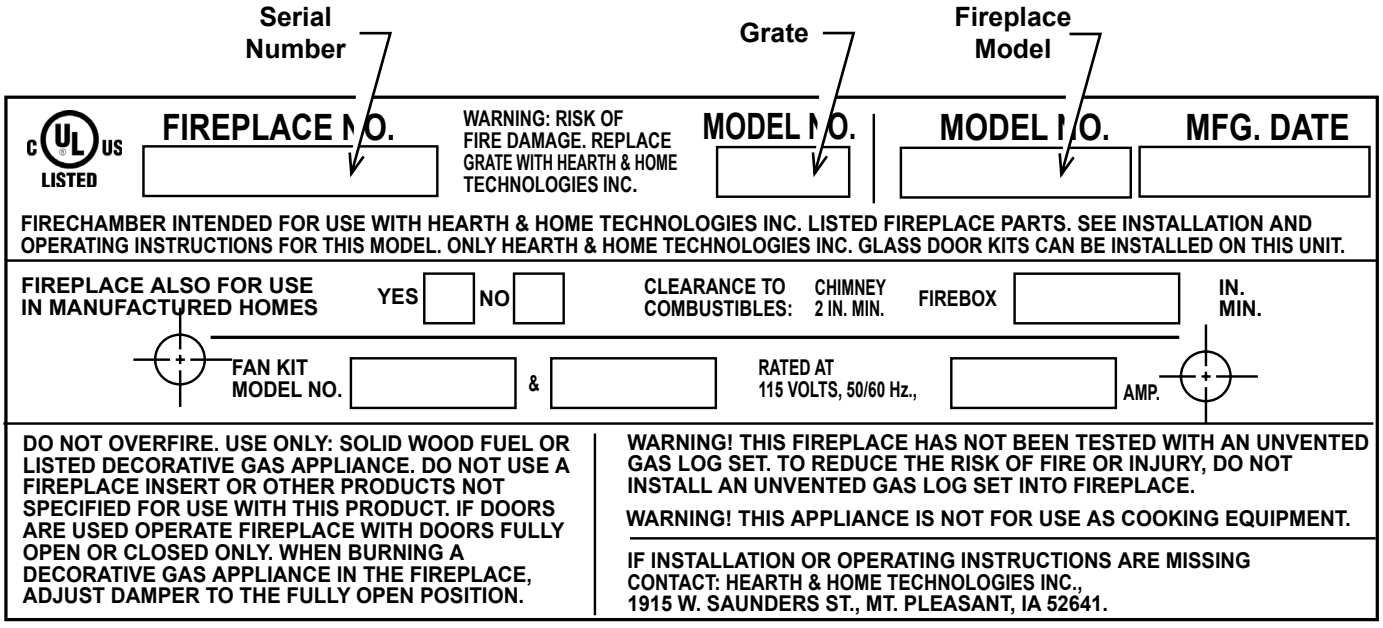
Notes: _____

_____

_____

Listing Label Information/Location

The model information regarding your specific fireplace can be found on the rating plate located on the smoke shield of the fireplace.


Serial Number
Grate
Fireplace Model
c UL us LISTED
FIREPLACE NO.
WARNING: RISK OF FIRE DAMAGE. REPLACE GRATE WITH HEARTH & HOME TECHNOLOGIES INC.
MODEL NO.
MODEL NO.
MFG. DATE
FIRECHAMBER INTENDED FOR USE WITH HEARTH & HOME TECHNOLOGIES INC. LISTED FIREPLACE PARTS. SEE INSTALLATION AND OPERATING INSTRUCTIONS FOR THIS MODEL. ONLY HEARTH & HOME TECHNOLOGIES INC. GLASS DOOR KITS CAN BE INSTALLED ON THIS UNIT.
FIREPLACE ALSO FOR USE IN MANUFACTURED HOMES
YES
NO
CLEARANCE TO COMBUSTIBLES:
CHIMNEY 2 IN. MIN.
FIREBOX
IN. MIN.
FAN KIT MODEL NO.
&
RATED AT 115 VOLTS, 50/60 Hz.,
AMP.
DO NOT OVERFIRE. USE ONLY: SOLID WOOD FUEL OR LISTED DECORATIVE GAS APPLIANCE. DO NOT USE A FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE WITH THIS PRODUCT. IF DOORS ARE USED OPERATE FIREPLACE WITH DOORS FULLY OPEN OR CLOSED ONLY. WHEN BURNING A DECORATIVE GAS APPLIANCE IN THE FIREPLACE, ADJUST DAMPER TO THE FULLY OPEN POSITION.
WARNING! THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO FIREPLACE.
WARNING! THIS APPLIANCE IS NOT FOR USE AS COOKING EQUIPMENT.
IF INSTALLATION OR OPERATING INSTRUCTIONS ARE MISSING CONTACT: HEARTH & HOME TECHNOLOGIES INC., 1915 W. SAUNDERS ST., MT. PLEASANT, IA 52641.

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Note: An arrow (➡) found in the text signifies change in content.

1 Listing and Code Approvals

A. Appliance Certification

This fireplace system has been tested and listed in accordance with **UL 127** standard by Underwriters Laboratories Inc. for installation and operation in the United States.

This fireplace has been tested and listed for use with the optional components specified in this manual. These optional components may be purchased separately and installed at a later date.

Installation of a dual cooling air kit is required and must be installed at the time of the initial fireplace installation. Failure to do so may result in a fire causing property damage and/or personal injury.

Heat & Glo LifeStyles Collection is a registered trademark of Hearth & Home Technologies Inc.

⚠ WARNING

Fire Risk

- **Do not** install or operate damaged fireplace.
- **Do not** modify fireplace.
- Installation other than as instructed by Hearth & Home Technologies Inc. is strictly prohibited.
- **Do not** operate the fireplace without fully assembling all components.
- **Do not overfire**.
- **Do not install an unvented gas log set.** This fireplace has not been tested for use with unvented gas log sets.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Hearth & Home Technologies disclaims any responsibility for, and the warranty and agency listing will be voided by the above actions.

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this fireplace. For assistance or additional information consult a qualified installer, service agency or your dealer.

Not intended for use as a primary heat source.

This fireplace is tested and approved as a decorative fireplace. It should not be factored as a primary heat source in residential heating calculations.

2 Getting Started

A. Design and Installation Considerations

CAUTION

Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

When planning a fireplace installation, it is necessary to determine the following information before installing:

- Where the fireplace is to be installed. See Sections 3 and 4.
- The vent system configuration to be used. See Sections 5 and 6.
- Framing and finishing details. See Sections 3, 6 and 8.
- Whether optional accessories are desired. See Section 12.

Draft is the pressure difference needed to vent fireplaces successfully. Considerations for successful draft include:

- Location of fireplace and chimney

Moisture Resistance:

This outdoor fireplace will shed moderate amounts of water, but is not waterproof. Water and condensing water vapor may enter the chase under certain conditions.

The fireplace will not perform as an exterior wall. Moisture penetration must be considered for construction that places the fireplace in structure walls or on moisture sensitive surfaces.

When installed on exterior walls: Hearth & Home Technologies recommends that the fireplace chase be constructed outside the structure's weather envelope. Where the platform meets the wall, use a flashing detail similar to that required for attached decks. Chase platforms, including hearths should slope away from the structure at 1/8 in. to 1/4 in. per foot. The fireplace can be shimmed level.

When installed on surfaces where water may collect or cause damage: Hearth & Home Technologies recommends that a drainage pan be placed under the unit. This can be constructed of metal, adhesive polymer membrane (such as ice and water shield) or other suitable materials. A means of drainage out of the pan such as tubes or weep holes should be provided. A slope of 1/8 in. to 1/4 in. per foot towards the drain port is suggested. The fireplace can be shimmed level.

Hearths should slope away from the front of the fireplace and chase at 1/8 in. to 1/4 in. per foot. Spark strips must be on top of any combustible hearth materials used for moisture management.

B. Typical Fireplace System

The Heat & Glo fireplace system consists of the following:

- Fireplace/integral grate/dual cooling air system
- Refractory
- Chimney termination cap
- Chimney system
- Hearth extension

Optional components include:

- Glass doors
- Weather cover

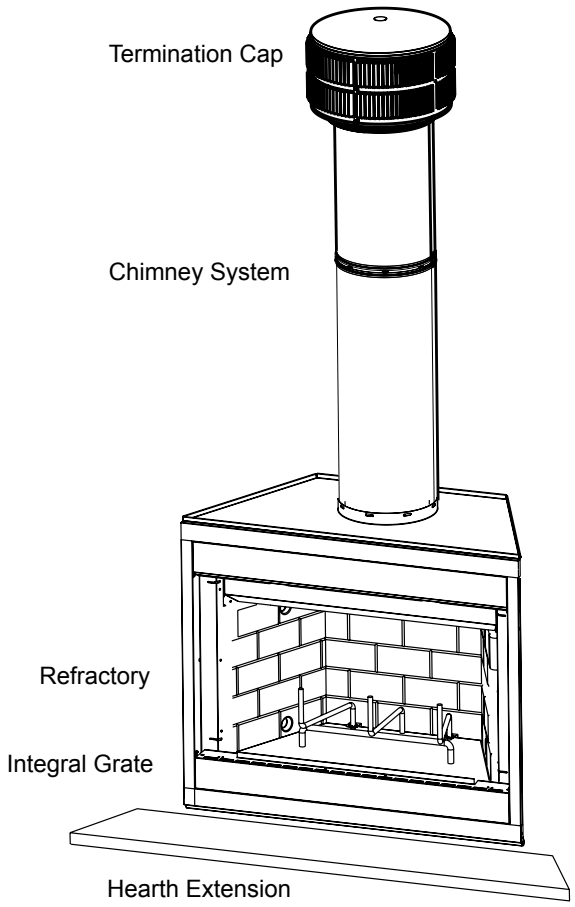


Figure 2.1 Typical Fireplace System

Figure 2.2 Typical Fireplace System

C. Tools and Supplies Needed

Before beginning the installation be sure the following tools and building supplies are available:

Reciprocating saw	Framing material
Pliers	High temp caulking material
Hammer	Gloves
Phillips screwdriver	Framing square
Flat blade screwdriver	Electric drill and bits
Plumb line	Safety glasses
Level	Tape measure

1/2-3/4 in. length, #6 or #8 self-drilling screws

Misc. screws and nails

CAUTION

- Keep fireplace dry.
- Mold or rust may cause odors.

D. Inspect Fireplace and Components

⚠ WARNING

Fire Risk

Explosion Risk

Inspect fireplace and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components

Report damaged parts to dealer.

- Carefully remove the fireplace and components from the packaging.
- The vent system components and doors are shipped in separate packages.
- Report to your dealer any parts damaged in shipment.
- **Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**

3 Framing and Clearances

⚠ WARNING

Fire Risk

Provide adequate clearances.

- Around air openings
- To combustibles
- For service access.

Locate fireplace away from traffic areas.

Note:

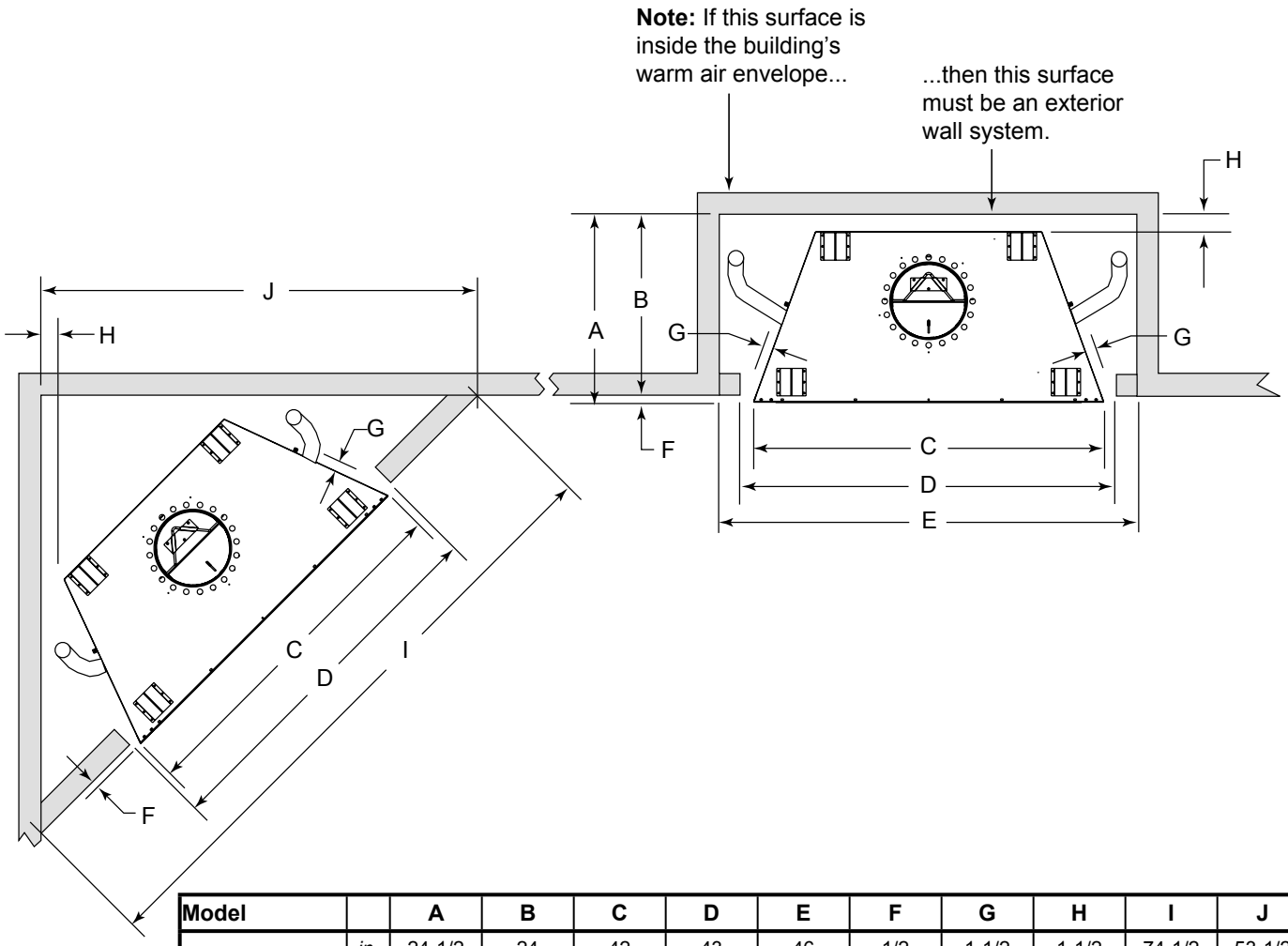
- Illustrations and photos reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation/appearance may vary due to individual design preference.
- Hearth & Home Technologies reserves the right to alter its products.

A. Selecting Fireplace Location

This outdoor fireplace will shed moderate amounts of water, but is not waterproof. Water and condensing water vapor may enter the chase under certain conditions.

The fireplace will not perform as an exterior wall. Moisture penetration must be considered for construction that places the fireplace against structure walls or on moisture sensitive surfaces.

- **Exterior Walls (see Figure 3.1)**
  Hearth & Home Technologies recommends that the fireplace chase be constructed outside the structure's weather envelope. Where the platform meets the wall, use a flashing detail similar to that required for attached decks. Chase platforms, including hearths, should slope away from the structure at 1/8 in to 1/4 in. per foot. The fireplace can be shimmed level. Build the outside enclosure out of standard building materials, being careful to maintain the minimum air clearances specified in these installation instructions.
- **Freestanding Installations (see Figure 3.2)**
  When installing this fireplace as a freestanding fireplace on your porch, patio or in your yard, it must be enclosed to prevent impact damage to the fireplace. The exterior of the enclosure may be finished in a textured plywood, a wood clapboard siding, brick, or a cultured stone. Vinyl siding is not recommended for use on the front of the fireplace due to the heat the fireplace produces. This can cause the vinyl siding to deteriorate.
- **When Installed on Surfaces Where Water May Collect or Cause Damage:**
  Hearth & Home Technologies recommends that a drainage pan be placed under the unit. This can be constructed of metal, adhesive polymer membrane (such as ice and water shield) or other suitable materials. A means of drainage out of the pan such as tubes or weep holes should be provided. A slope of 1/8 in. to 1/4 in. per foot towards the drain port is suggested. The fireplace can be shimmed level.
  Hearths should slope away from the front of the fireplace and chase at 1/8 in. to 1/4 in. per foot. Spark strips must be used on top of any combustible hearth materials used for moisture management.



Model		A	B	C	D	E	F	G	H	I	J
MONTANA-36	*in.*	24-1/2	24	42	43	46	1/2	1-1/2	1-1/2	74-1/2	53-1/2
	mm	622	610	1067	1092	1168	13	38	38	1892	1359
MONTANA-42	*in.*	24-1/2	24	48	49	52	1/2	1-1/2	1-1/2	80-1/2	57
	mm	622	610	1219	1245	1321	13	38	38	2045	1448

Figure 3.1 Fireplace Locations

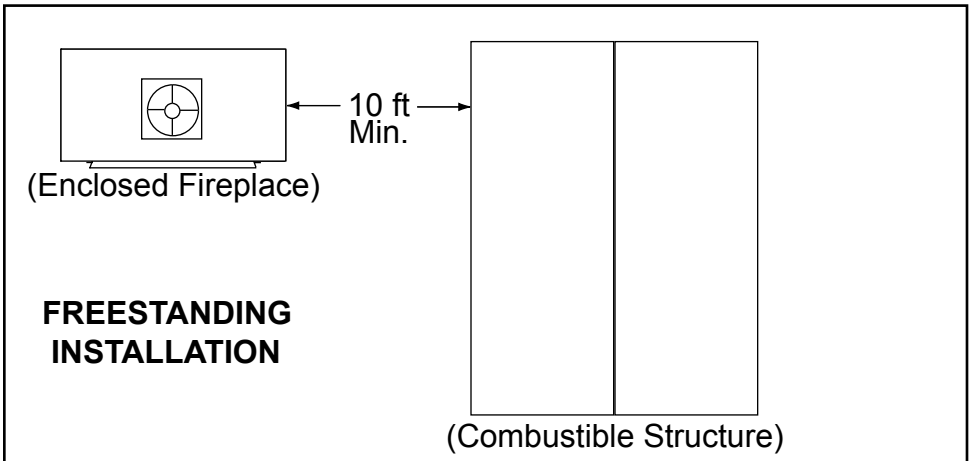


Figure 3.2 Freestanding Fireplace Locations

B. Clearances

⚠ WARNING

Fire Risk

- Comply with all minimum clearances to combustibles as specified.

Failure to comply may cause fire.

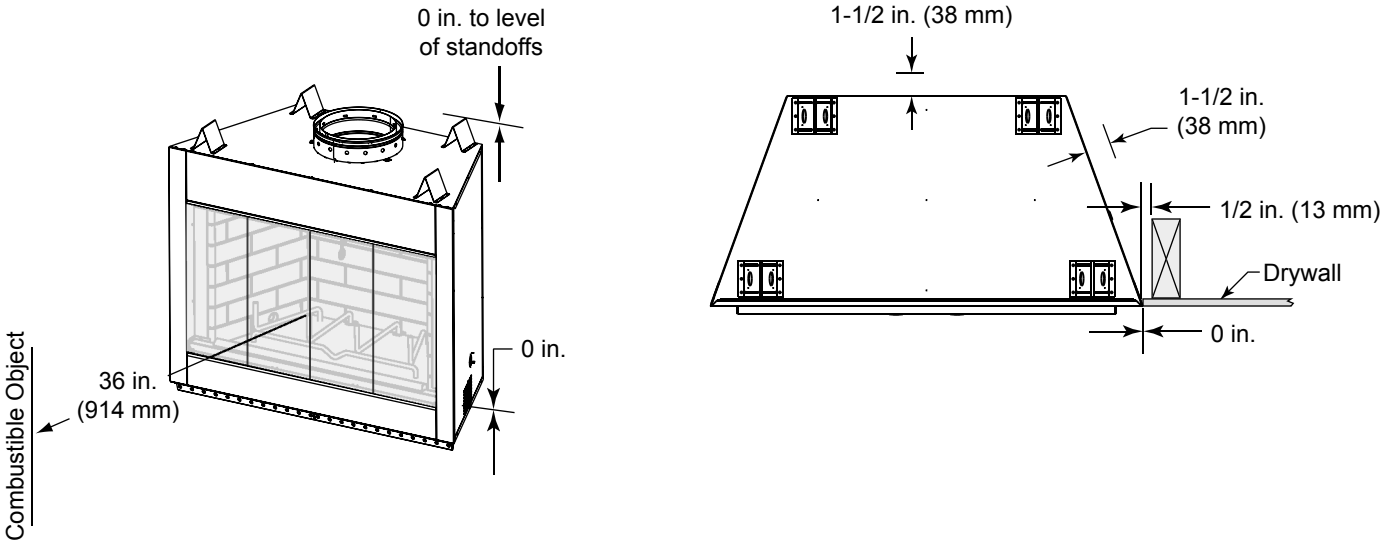
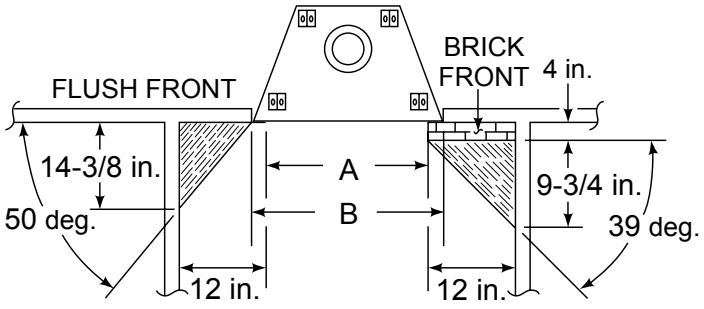


Figure 3.3 Clearances to Combustible Materials

C. Sidewalls/Surrounds

Adjacent combustible side walls must be located a minimum of 12 in. (305 mm) from the fireplace opening. See Figure 3.4. If you are using a decorative surround constructed of combustible material, it must be located within the shaded area defined in Figure 3.3. Short stub walls are also acceptable if they are contained within the shaded area.

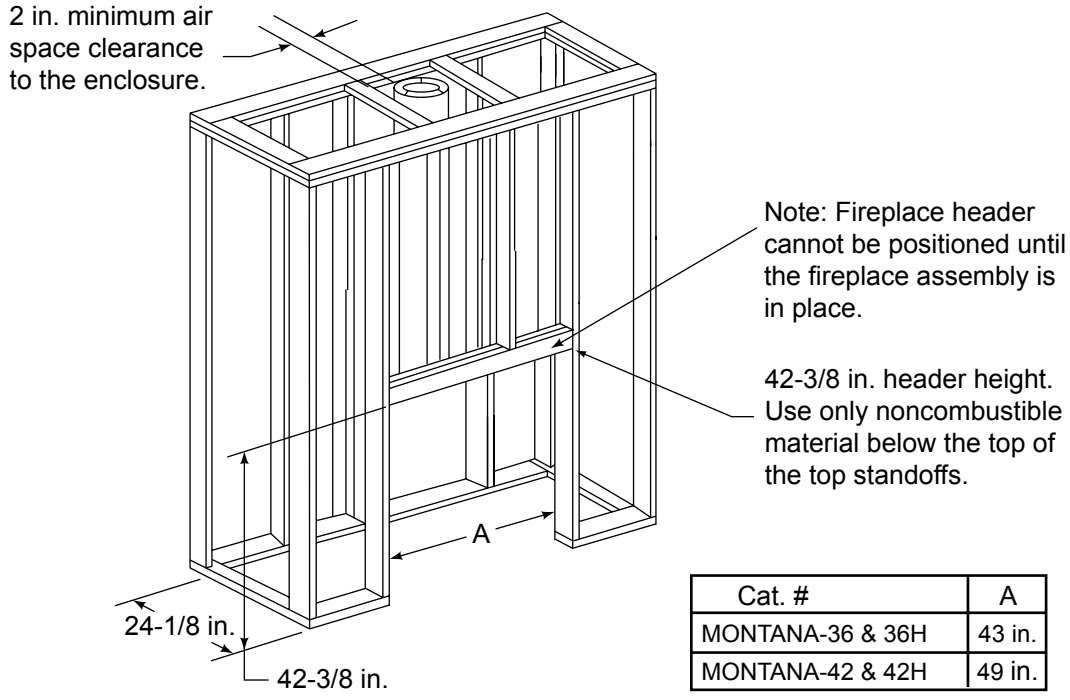


Cat #	A	B
MONTANA-36 & 36H	36 in.	42 in.
MONTANA-42 & 42H	42 in.	48 in.

Figure 3.4 Sidewalls and Surrounds

D. Frame the Fireplace

Figure 3.5 shows a typical framing (using 2 x 4 lumber) of the fireplace, assuming combustible materials are used. All required clearances to combustibles around the fireplace must be adhered to. See Figure 3.2. Any framing across the top of the fireplace must be above the level of the top standoffs.


2 in. minimum air space clearance to the enclosure.
Note: Fireplace header cannot be positioned until the fireplace assembly is in place.
42-3/8 in. header height. Use only noncombustible material below the top of the top standoffs.
A
24-1/8 in.
42-3/8 in.

Cat. #	A
MONTANA-36 & 36H	43 in.
MONTANA-42 & 42H	49 in.

Figure 3.5 Framing the Fireplace

E. Chimney Requirements

When planning your fireplace location, the chimney construction and necessary clearances must be considered. The fireplace system and chimney components have been tested to provide flexibility in construction. The following figures are the minimum distances from the base of the fireplace.

Minimum overall straight height is 6 ft 4 in. if the fireplace is freestanding a minimum of 10 ft from a combustible structure. See Figure 3.2.

	ft	m
• Minimum overall straight height	14	4.27
• Minimum height with offset/return	16	4.88
• Maximum height	90	27.43
• Maximum chimney length between an offset and return	20	6.1
• Maximum distance between chimney stabilizers	35	10.67
• Double offset/return minimum height	24	7.32
• Maximum unsupported chimney length between the offset and return	6	1.83
• Maximum unsupported chimney height above the fireplace	35	10.67
• Minimum overall straight height if fireplace is freestanding	6.33	1.93

Note: A maximum of two pairs of offsets and returns may be used.

4 Installation of Fireplace

CAUTION

Sharp Edges

- Wear protective gloves and safety glasses during installation.

A. Install the Dual Cooling Air Kit

The cooling air kit is supplied as a standard feature with this fireplace and is required for safe operation. Installation must be done at the time of initial construction. The cooling air inlet tubes must be a minimum of 72 in. (1829 mm) above the base of the fireplace to prevent potential blockage by snow or yard debris. See Figure 4.1.

To install the air kit collar, slide one of the tabs down into the seam. See Figure 4.2. Secure the collar tabs to the fireplace with screws placed into the holes provided. See Figure 4.3.

Repeat for other side.

Note: The cooling air kit must terminate at least 6 ft. (1.83 m) above ground level.

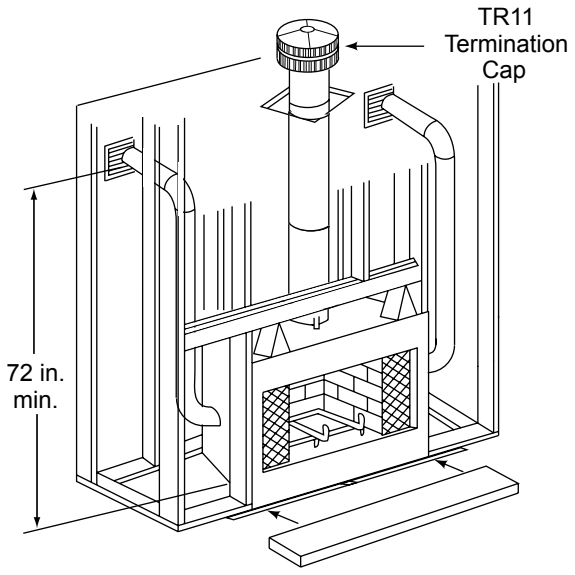


Figure 4.1 Cooling Air Location

⚠ WARNING

Fire Risk

Asphyxiation Risk

Do not draw outside combustion air from:

- Wall, floor or ceiling cavity.
- Enclosed space such as an attic or garage.
- Close proximity to exhaust vents or chimneys.

Fumes or odor may result.

Figure 4.2 Slide the Tabs

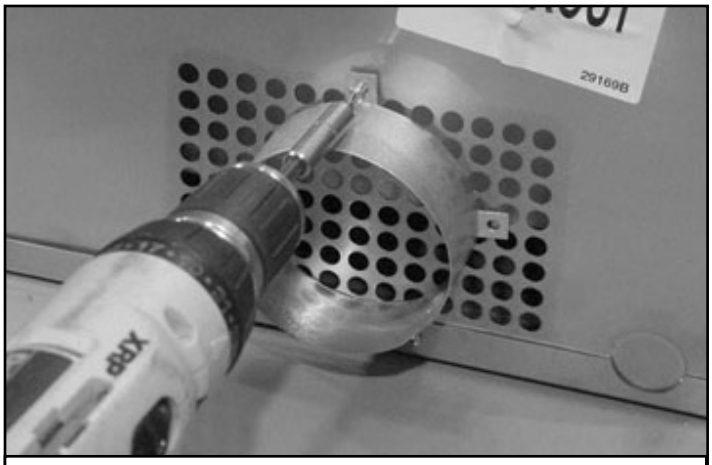


Figure 4.3 Secure the Tabs

B. Secure the Fireplace

- **Position the Fireplace**

  This fireplace may be placed on either a combustible or noncombustible continuous flat surface. Follow the instructions for framing in Section 3.D. Slide the fireplace into position. Be sure to provide the minimum air clearance at the sides and back of the fireplace assembly. See Section 3.B.

⚠ WARNING

Fire Risk!

- Prevent contact with sagging, loose insulation.
- Do NOT install against vapor barriers or exposed insulation.

- **Place the Protective Metal Hearth Strips**

⚠ WARNING

Fire Risk!

- Metal hearth strips MUST be installed.

Sparks or embers may ignite flooring.

Included with your fireplace you will find two metal hearth strips measuring approximately 26 in. x 4 in. (660 mm x 102 mm). These strips are used to provide added protection where the fireplace and the hearth extension meet.

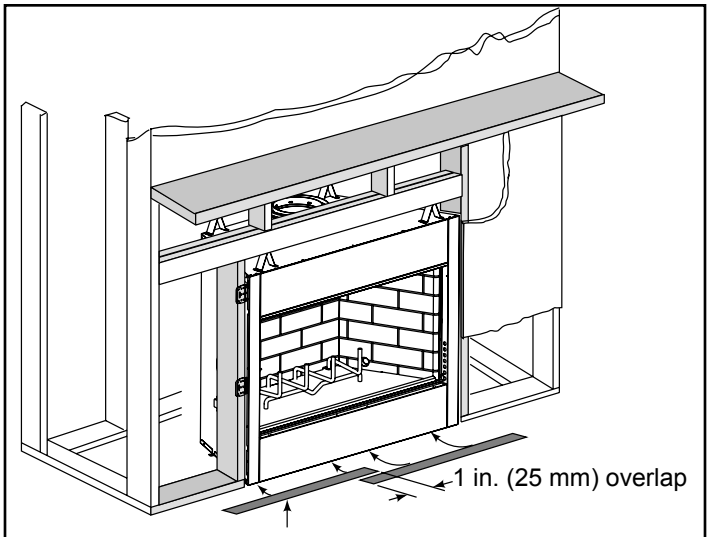
Slide each metal strip 2 in. (51 mm) under the front edge of the fireplace. The individual pieces must overlap each other by 1 in. (25 mm) minimum in the middle of the fireplace to provide continuous coverage of the floor. See Figure 4.4. These metal strips should extend from the front and sides of the fireplace opening by 2 in. (51 mm).

Note: When elevating the fireplace above the hearth extension the front of the elevated platform must be protected with a protective metal hearth strip as shown in Figure 4.6.

- **Level the Fireplace**

  Level the fireplace side-to-side and front-to-back. Shim with noncombustible material, such as sheet metal, as necessary. Secure the fireplace (using the nailing flanges located on either side of the fireplace) to the vertical framing.

Important: To ensure proper fit of the glass doors, check the fireplace opening for square. Measure diagonal distances of the opening to make sure they are equal. If they are not, continue to shim the fireplace until those diagonals are equal.



Metal strips are placed 2 in. (51 mm) under the front of the fireplace and must extend beyond the front and sides of fireplace opening by 2 in. (51 mm).

Figure 4.4 Position the Protective Metal Hearth Strips

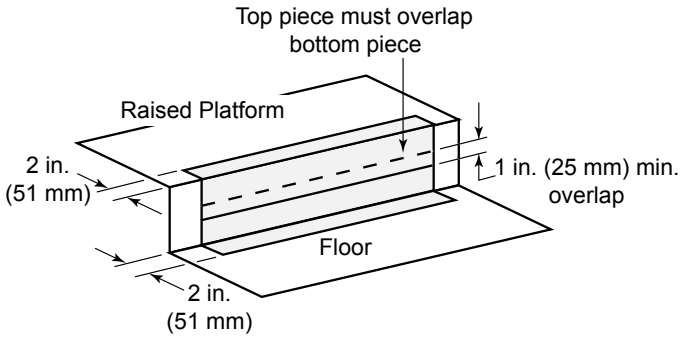


Figure 4.5 Protect the Front of an Elevated Platform

5 Chimney Assembly

A. Chimney Requirements

Vertical distances are measured from the base of the fireplace as shown in Figure 5.2.

	ft	m
• Minimum overall straight height	14	4.27
• Minimum height with offset/return	16	4.88
• Maximum height	90	27.43
• Maximum chimney length between an offset and return	20	6.1
• Maximum distance between chimney stabilizers	35	10.67
• Double offset/return minimum height	24	7.32
• Maximum unsupported chimney length between the offset and return	6	1.83
• Maximum unsupported chimney height above the fireplace	35	10.67
• Minimum overall straight height if fireplace is freestanding	6.33	1.93

Note: A maximum of two pairs of offsets and returns may be used.

⚠ WARNING

Fire Risk

- Must maintain 2 in. (51 mm) air clearance to insulation and other combustible materials.

To determine the chimney components needed to complete your particular installation, follow the steps below:

- Determine the total vertical height of the fireplace installation. This dimension is measured from the base of the fireplace assembly to the point where the smoke exits the termination cap.
- Subtract the effective height of the fireplace assembly from the overall height of the fireplace installation (measured from the base of the fireplace to the bottom of the termination cap).
- Refer to Table 5.1 to determine what components must be selected to complete the fireplace installation.
- Determine the number of ceiling firestops, stabilizers, roof flashing, etc. required to complete the fireplace installation.

⚠ CAUTION

- Do NOT connect this fireplace to a chimney flue servicing another appliance.
- Do NOT connect to any air distribution duct or system.

Table 5.1

HEIGHT OF CHIMNEY COMPONENTS		*in.*	*mm*
Chimney Stabilizer			
	SL11	4-3/4	121
Ceiling Firestops			
	FS538	0	0
	FS540	0	0
Offsets/Returns			
	SL1130	18	457
Roof Flashing			
	RF570	0	0
	RF571	0	0
Chimney Sections*			
	SL1106	4-3/4	121
	SL1112	10-3/4	273
	SL1118	16-3/4	425
	SL1136	34-3/4	883
	SL1148	46-3/4	1187

*** Dimensions reflect effective height.**

B. Using Offsets/Returns

To bypass any overhead obstructions, the chimney may be offset using a 30-deg (SL1130) offset/return.

An offset and return may be attached together or a chimney section(s) may be used between an offset and return.

Perform the following steps to determine the correct chimney component combination for your particular installation:

⚠ WARNING

Fire Risk

- Draft will be restricted if offsets/returns greater than 30° are used.

- Measure how far the chimney needs to be shifted to enable it to avoid the overhead obstacle. See Figure 5.1. Use dimension "A" to determine chimney section required to achieve the needed shift.
- After determining the offset dimension, refer to Table 5.2 and find the "A" dimension closest to but not less than the distance of shift needed for your installation.
- The "B" dimension that coincides with the "A" dimension represents the required vertical clearance that is needed to complete the offset and return.
- Read across the chart and find the number of chimney sections required and the model number of those particular chimney parts.
- Whenever the chimney penetrates a floor/ceiling, a ceiling firestop must be installed.
- The effective height of the fireplace assembly is measured from the base of the fireplace to the top of the starter collar. See Dimensions in Section 12.

➡ Table 5.2

A		B						
in.	*mm*	*in.*	*mm*	SL1106	SL1112	SL1118	SL1136	SL1148
4 7/8	124	17 7/8	454	-	-	-	-	-
7 1/4	184	22	559	1	-	-	-	-
9 3/4	248	26 1/8	664	2	-	-	-	-
10 1/4	260	27 1/4	692	-	1	-	-	-
12 3/4	324	31 3/8	797	1	1	-	-	-
13 1/4	337	32 3/8	822	-	-	1	-	-
15 3/4	400	36 5/8	930	-	2	-	-	-
18 1/8	460	40 3/4	1035	1	2	-	-	-
18 3/4	476	41 3/4	1060	-	1	1	-	-
21 3/4	552	4 7	1194	-	-	2	-	-
22 1/4	565	48	1219	-	-	-	1	-
24 3/4	629	52 1/8	1324	1	-	-	1	-
27 3/4	705	57 3/8	1457	-	1	-	1	-
28 1/4	718	58 3/8	1483	-	-	-	-	1
30 3/4	781	62 1/2	1588	1	-	-	-	1
33 3/4	857	67 3/4	1721	-	1	-	-	1
36 3/4	933	7 3	1854	-	-	1	-	1
39 3/4	1010	78 1/8	1984	-	-	-	2	-
41 1/8	1045	82 3/8	2092	1	-	-	2	-
45 3/4	1162	88 1/2	2248	-	-	-	1	1
48 1/8	1222	92 3/4	2356	1	-	-	1	1
51 3/4	1314	98 7/8	2511	-	-	-	-	2

Proper assembly of air cooled chimney parts results in an overlap of chimney joints of 1-1/4 in. (32 mm). Effective length is built into this table.

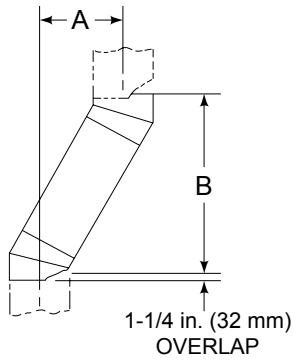


Figure 5.1 Chimney Offset/Return

➡ **Example:** Your "A" dimension from Figure 5.3 is 14 1/2 in. (368 mm). Using Table 5.2 the dimension closest to, but not less than 14 1/2 in. (368 mm) is 15 3/4 in. (400 mm) using a 30° offset/return. It is then determined from the table that you would need 36 5/8 in. (930 mm) (Dimension "B") between the offset and return. The chimney components that best fit your application are two SL1112s.

C. Assemble the Chimney Sections

Attach either a straight chimney section or an offset to the top of the fireplace (depending on your installation requirement). Chimney sections are locked together by pushing downward until the top section meets the stop bead on the lower section.

The inner flue is placed to the inside of the flue section below it. The outer casing is placed outside the outer casing of the chimney section below it. See Figure 5.2.

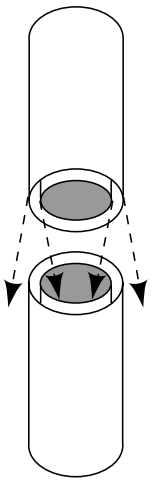


Figure 5.2 Assembling Chimney Sections

Note: Inner flue and outer liner sections cannot be disassembled once locked together. Plan ahead to ensure the proper installation height is achieved with the selected chimney components.

⚠ WARNING

Fire Risk

Do NOT install substitute or damaged chimney components.

- MUST use chimney system described in this manual.
- NO OTHER chimney components may be used.

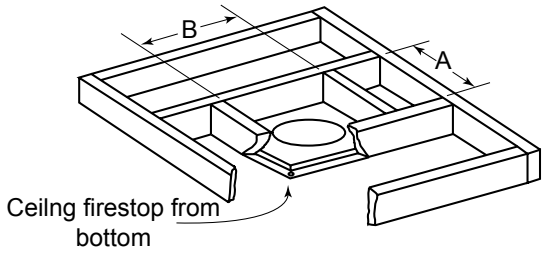
Substitute or damaged chimney components may impair safe operation.

D. Install the Ceiling Firestops

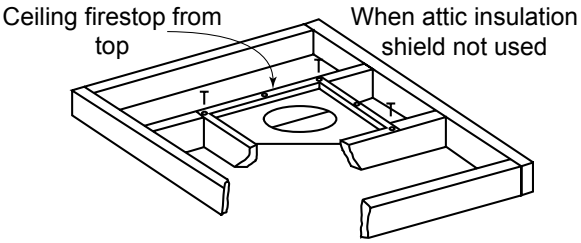
- Mark and cut an opening in the ceiling for the ceiling firestop being used. See Figure 5.3.
- Frame the opening with the same size lumber used in the ceiling joists.
- Install the ceiling firestop.

Note: The ceiling firestop MUST be nailed to the bottom of the ceiling joists EXCEPT when the space above is uninsulated and the attic insulation shield is not being used (see Figure 5.5). When the attic insulation shield is used the ceiling firestop may be above or below the joist of an insulated ceiling.

ROOM ABOVE (non-insulated ceiling)



ATTIC ABOVE (insulated ceiling)



Note: Use same dimensional lumber for framing ceiling firestop and joists.

	A		B	
Catalog #	*in.*	*mm*	*in.*	*mm*
FS538	17	432	17	432
FS540	17	432	26	660

Figure 5.3 Installing the Ceiling Firestop

Note: You must provide support for the pipe during construction and check to be sure inadvertent loading has not dislodged the chimney section from the fireplace or at any chimney joint.

CAUTION

- Ceiling firestops must be used at ceiling/floor.
- Chase construction requires ceiling firestops at each floor or every 10 ft (3.05 m) of clear space.
- Use same dimensional lumber as joists.

Ceiling firestop slows spread of fire and reduces cold air infiltration.

E. Install the Attic Insulation Shield

An insulation shield must be installed when there is a possibility of insulation coming into contact with the factory built chimney system.

- Bend the tabs at the top of the attic insulation shield inward. This will help keep the chimney section centered in the shield.
- Position the shield over the vertical chimney section where it penetrates a ceiling firestop.
- Slide the shield down until it rests on the ceiling firestop. The ceiling firestop will support the insulation shield. See Figures 5.4 and 5.5.

⚠ WARNING

Fire Risk

- DO NOT pack insulation or other combustibles: between ceiling firestops; between chimney and attic insulation shield.
- ALWAYS maintain specified clearances around chimney and ceiling firestops.
- Install ceiling firestops as specified.

Failure to keep insulation or other material away from chimney pipe may cause fire.

F. Double-check the Chimney Assembly

Continue assembling the chimney sections up through the ceiling firestops as needed. While doing so, be aware of the height and unsupported chimney length limitations given under Section 5.A. Chimney Requirements.

Check each section by pulling up slightly from the top to ensure proper engagement before installing the succeeding sections. If they have been connected correctly, they will not disengage when tested.

G. Secure the Chimney

When offsets and returns are joined to straight pipe sections, they must be locked into position with the screws provided* (outer only), using the predrilled holes. To prevent gravity from pulling the chimney sections apart, the returns and the chimney stabilizers have hanger straps for securing these parts to joists or rafters. See Figure 5.6.

* or equivalent #6 or #8 sheet metal screw no longer than 3/4 in. (19 mm).

⚠ WARNING

Fire Risk

- Secure offsets with screws (not to exceed 3/4 in./19 mm in length).
- Secure returns with strapping.
- Straight chimney sections may be secured with screws (not to exceed 3/4 in./19 mm in length) at the joints.

Keep chimney sections from separating or twisting.

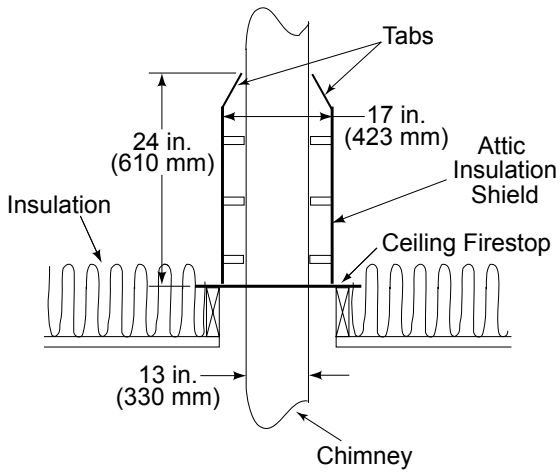


Figure 5.4 Install Attic Insulation Shield Above the Ceiling

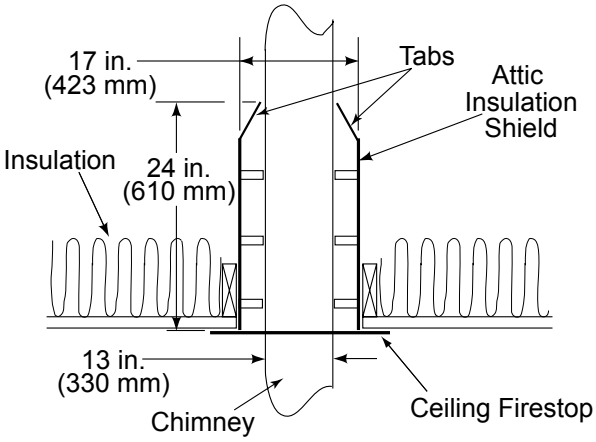


Figure 5.5 Install Attic Insulation Shield Below the Ceiling

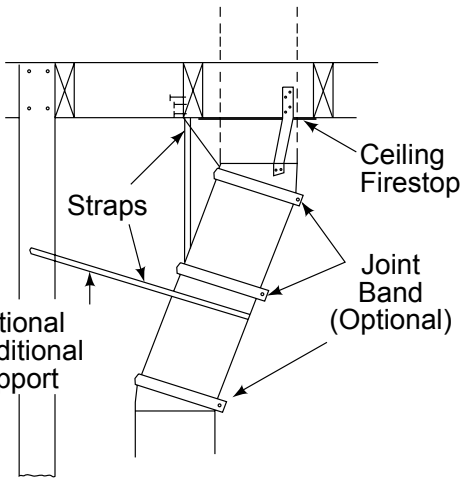


Figure 5.6 Secure the Chimney

6 Complete the Enclosure

A. Chimney Termination

Chimney Termination Requirements

- Must have a cap approved and listed for this fireplace system
- Must not be located where it will become plugged by snow or other material
- Must terminate at least 3 ft (914 mm) above the roof **and** at least 2 ft (610 mm) above any portion of the roof within 10 ft (3.05 m),
- Must be located away from trees or other structures

Mark the Exit Point of the Roof

Locate the point where the chimney will exit the roof by plumbing down to the center of the chimney. Drive a nail up through the roof to mark the center. See Figure 6.1.

Cut Out the Hole in the Roof

Measure to either side of the nail and mark the 14-1/2 in. x 14-1/2 in. (368 mm x 368 mm) opening required. This is measured on the horizontal; actual length may be larger depending on the pitch of the roof. Cut out and frame the opening. See **Chapter 25** of the **Uniform Building Code** for roof framing details.

Assemble the Chimney Sections Through the Roof

Continue to add chimney sections through the roof opening, maintaining at least a 2 in. (51 mm) air space to combustible materials.

Install the Roof Flashing

If a roof flashing is to be used, install the roof flashing appropriate to the roof pitch and install a round termination cap and storm collar following the instructions shipped with the cap.

Install the Chimney Air Kit (required in Canada):

When installing the chimney air kit, follow the instructions provided with this accessory.

⚠ WARNING

Fire Risk

- Must maintain 2 in. air (51 mm) clearance to insulation and other combustible materials.

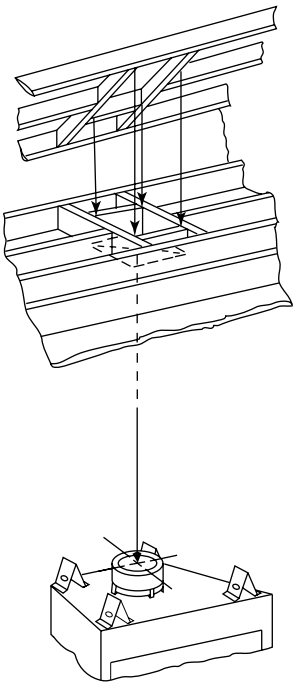


Figure 6.1 Ceiling/Attic Construction

B. Chase Top

A metal chase top is required to seal the top of the chase around the chimney pipe. The top should include a turn-down and drip edge to prevent water from seeping into the chase. Provide a 1/8 in. (3 mm) gap around the flue pipe and slope the top downward away from the penetration. See Figure 6.2.

- All seams must be caulked to prevent leaks.
- A chase installation must use a chase top. Chase tops are available from your Heat & Glo dealer or may be field constructed.
- Attach the chase top to the top of the chase.

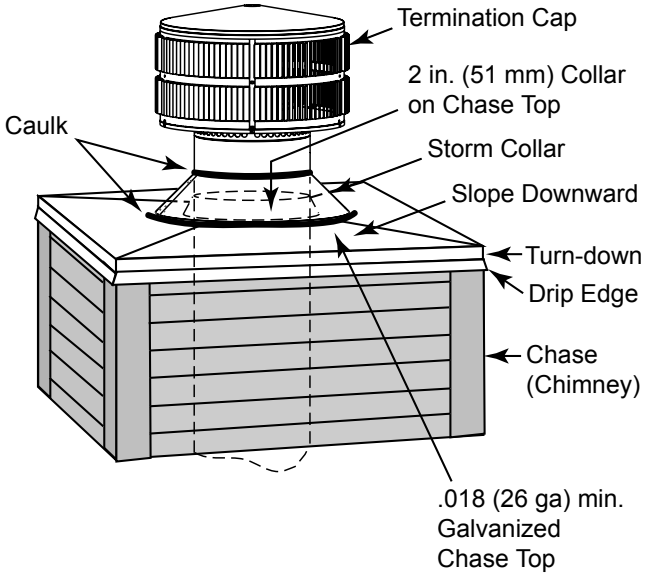


Figure 6.2 Chase Top Construction

C. Install the Termination Cap

Note: To protect against the effect of corrosion on those parts exposed to the weather, the termination cap can be painted with a rust-resistant paint.

⚠ WARNING

Fire Risk

- The minimum overlap of cap to pipe MUST be met or chimney may separate from cap.

Separation allows sparks, heat and embers to escape.

- Install the chimney sections up through the chase enclosure. When using a TR11 Round Termination Cap, the uppermost top section of pipe must extend 6 in. (152 mm) above the top of the flashing collar to allow installation of the storm collar and termination cap. See Figure 6.3.

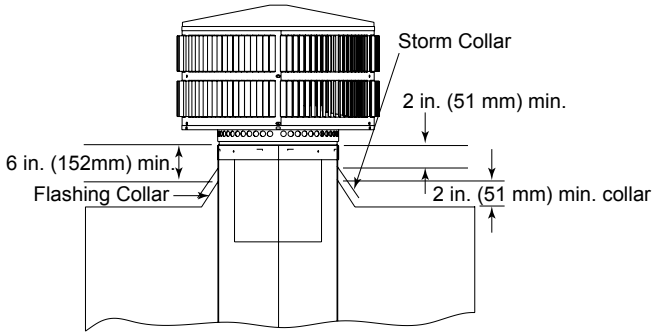


Figure 6.3 Installing a TR11 Round Termination Cap

- For installations utilizing a TR11T Round Telescoping Termination Cap, the uppermost chimney section must be below the top of the chase top, but not more than 14-1/2 in. (368 mm) below the top of the chase top. Minimum overlap of chimney and termination cap must be 1-1/2 in. (38 mm). See Figure 6.4.

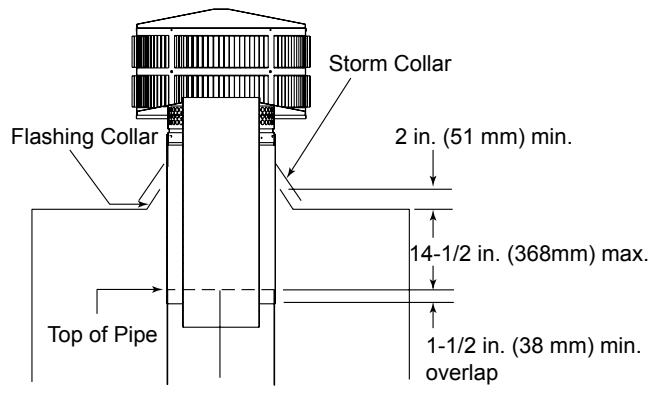


Figure 6.4 Installing a TR11T Round Telescoping Termination Cap

- For installations utilizing an ST1175 Square Termination Cap the last chimney section must not be more than 4-1/2 in. (114 mm) below the chase top. See Figure 6.5.

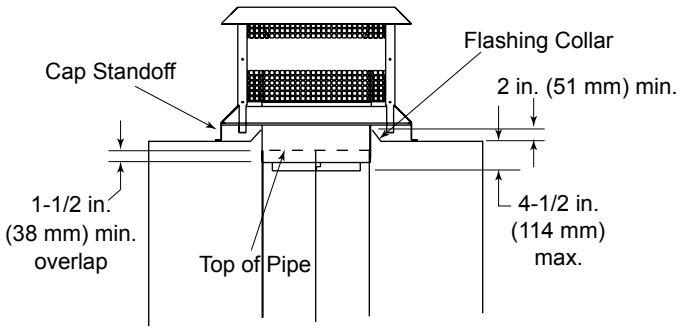


Figure 6.5 Installing an ST1175 Square Termination Cap

- For installations utilizing an TCT1175 Terra Cotta Cap the last chimney section must be between 7 in. (178 mm) below the chase top and 2 in. (51 mm) above. See Figure 6.6.

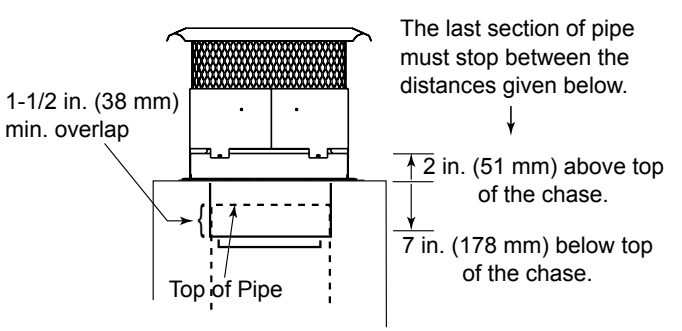


Figure 6.6 Installing a TCT1175 Terra Cotta Cap

- For chase installations you can use a TR11 Round Termination Cap, a TR11T Round Telescoping Termination Cap, an ST1175 Square Termination Cap, or a TCT1175 Terra Cotta Termination Cap.
- Install termination caps following instructions provided with them.

7 Accessories

A. Gas Log/Lighter Provisions

A certified gas log lighter or decorative gas log set can be installed in this fireplace.

This fireplace was not teste3d and listed for use with an unvented gas log heater. Do not install an unvented gas log heater in this fireplace and operate it with the flue damper in the closed position unless the unvented gas log heater has been specifically tested and listed for use in this fireplace by Underwriters Laboratories Inc.

Use of an unvented gas log heater in this factory built fireplace may create a fire hazard that can result in a structure fire.

- Maximum input is 100,000 BTU/hr.
- Decorative gas appliance must be certified to **ANSI Z21.60** "Standard for Decorative Gas Appliances for Installation in Vented Fireplaces".
- Must be installed in accordance with the **National Fuel Gas Code, ANSI Z223.1.**
- A log set must incorporate a gas shutoff.
- Log set requires the damper to be locked fully open.

Knockouts are provided on both sides of the fireplace and in refractories for 1/2 in. (13 mm) iron pipe.

- We recommend you seal refractory around pipe with fireplace mortar or cement.
- Repack insulation from the knockout around the pipe.
- Maintain 1-1/2 in. (38 mm) air space around the pipe for 4 in. (102 mm) beyond the fireplace.
- See Figure 7.1.

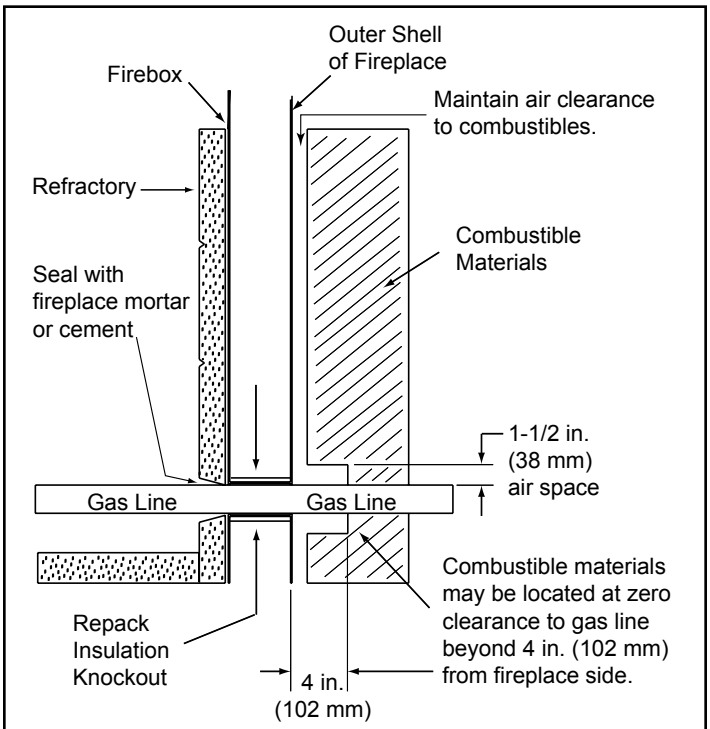


Figure 7.1 Gas Line Installation

⚠ WARNING

Asphyxiation Risk

- Damper must be locked open when gas logs installed.

Gas fire generates fumes.

⚠ WARNING

Fire Risk

- For use with solid wood fuel or decorative gas appliance only.
- DO NOT install unvented gas logs.

⚠ WARNING

Fire Risk

Explosion Risk

Inspect appliance and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components

Report damaged parts to dealer.

8 Finishing

A. Hearth Extension

A hearth extension must be installed with all fireplaces to protect the combustible floor in front of the fireplace from both radiant heat and sparks. See Figures 8.1-8.3.

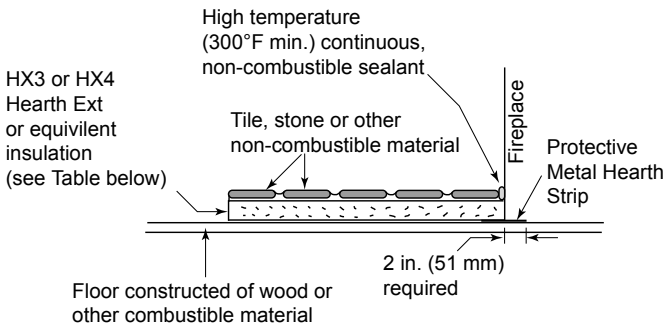


Figure 8.1 Hearth Extension Construction

The hearth extension should slope away from the front of the fireplace and chase at 1/8 in. to 1/4 in. per foot. Spark strips must be used on top of any combustible hearth materials used for moisture management.

This fireplace has been tested and approved for use with a hearth extension insulated to a minimum R value of 1.16.

To substitute materials for the factory-available hearth extensions, see Figure 8.3 and calculate insulation alternatives as per Table 8.1 and the following formulas:

- Thermal conductivity per inch thickness = **k**
- k = (BTU)(inch) / (foot^2)(hour)(°F)
- Required thickness = Rk

- Thermal resistance per inch thickness = **r**
- r = (foot^2)(hour)(°F) / (BTU)(inch)
- Required thickness = R / rB.

Table 8.1

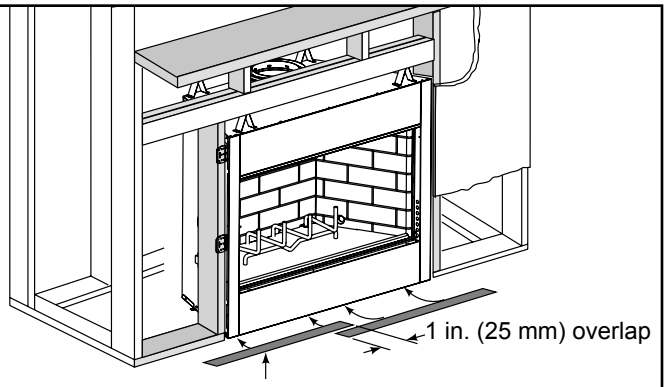
Hearth Extension Insulation Alternatives, R Value = 1.16			
Material	k per inch thick	r per inch thick	Minimum thickness required
Hearth & Home HX3, HX4	0.43	2.33	1/2 in.
USG Micore 300™	0.46	2.18	1/2 in.
USG Durock™ Cement Board	1.92	0.52	2-1/4 in.
Cement Mortar	5.0	0.20	5-7/8 in.
Common Brick	5.0	0.20	5-7/8 in.
Ceramic Tile	12.50	0.08	14-5/8 in.
Armstrong™ Privacy Guard Plus	0.46	3.28	1/2 in.
Marble	14.3-20.0	0.07-0.05	16-5/8 in. - 23-3/8 in.

⚠ WARNING

Fire Risk

- Metal hearth strips MUST be installed.

Sparks or embers may ignite flooring.



Metal strips are placed 2 in. (51 mm) under the front of the fireplace and must extend beyond the front and sides of fireplace opening by 2 in. (51 mm).

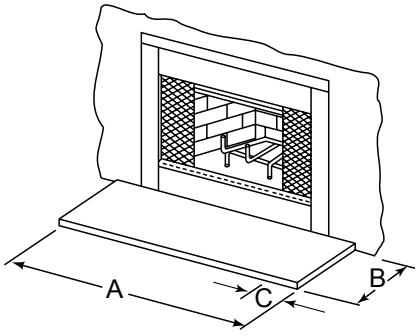
Figure 8.2 Positioning the Protective Metal Hearth Strips

⚠ WARNING

Fire Risk

- Hearth extensions must be installed exactly as specified.

High temperatures or hot embers may ignite concealed combustibles.



CAT. #		A	B
HX3	*in*	52	16
	mm	1321	406
HX4	*in*	66	20
	mm	1676	508

Figure 8.3 Hearth Extension Dimensions

B. Finishing Material

- **Combustible Material**
  Material which is made of or surfaced with wood, compressed paper, plant fibers, plastics, or any material capable of igniting and burning, whether flame proofed or not, plastered or not plastered.
- **Non-Combustible Material**
  Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.
- **Non-Combustible Sealant Material**
  Sealants which will not ignite and burn: Rutland, Inc. Fireplace Mortar #63 (or equivalent).

After completing the framing and applying the facing material (drywall) over the framing, a bead of non-combustible sealant must be used to close off any gaps at the top and sides between the fireplace and facing to prevent cold air leaks. Large gaps can be bridged with fiberglass rope gasket.

Only non-combustible materials may be used to cover the black metal fireplace front.

⚠ WARNING

Fire Risk

- Use only non-combustible material below standoffs.
- Material such as cement board is acceptable.

C. Mantel

A combustible mantel may be positioned no lower than 12 in. (305 mm) above the top of the fireplace opening. The combustible mantel may have a maximum depth of 12 in. (305 mm), Combustible trim pieces that project no more than 1-1/2 in. (38 mm) from the face of the fireplace can be placed no closer than 6 in. (152 mm) from the top of the fireplace opening. See Figure 8.4. Combustible trim must not cover the metal surfaces of the fireplace. This mantel clearance is in accordance with **Section 7-3.3.3 of ANSI/ NFPA211**.

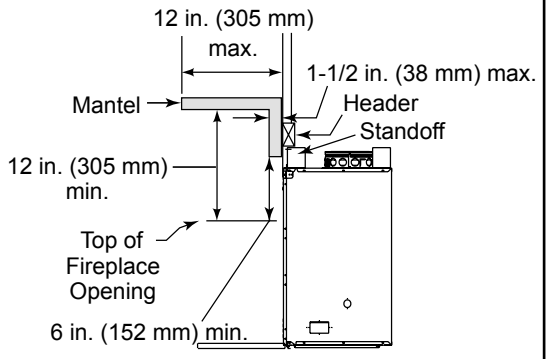


Figure 8.4 Mantel Specifications

⚠ WARNING

Fire Risk

Do NOT obstruct air inlet or outlet grilles.

Do NOT modify grilles.

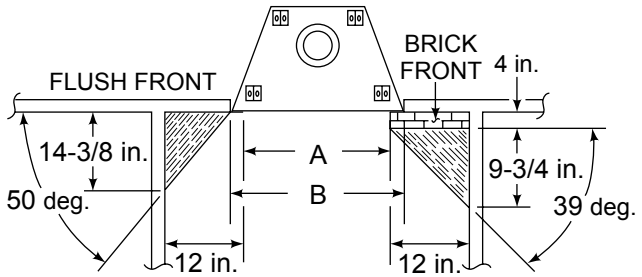
- Modifying or covering grilles could cause temperature rise and fire hazard.

Finishing materials must not interfere with:

- Air flow through grilles or louvers
- Operation of louvers or doors
- Access for service

D. Sidewalls/Surrounds

Adjacent combustible side walls must be located a minimum of 12 in. (305 mm) from the fireplace opening. If you are using a decorative surround constructed of combustible material, it must be located within the shaded area defined in Figure 8.5. Short stub walls are also acceptable if they are contained within the shaded area.



Cat #	A	B
MONTANA-36 & 36H	36 in.	42 in.
MONTANA-42 & 42H	42 in.	48 in.

Figure 8.5 Sidewalls/Surrounds

⚠ WARNING

Fire Risk

Finish all edges and fronts to clearances and specifications.

- Metal fireplace front may be covered with non-combustible material only.
- Do NOT overlap combustible materials onto fireplace front.
- Install combustible materials up to specified clearances on top front and side edges.
- Seal joints between the finished wall and fireplace top and sides using only a 300° F minimum sealant.

E. Glass Doors

This fireplace has been tested and listed for use with doors as specified in Section 12.B. Fireplace Components. Please refer to the manual packed with each set of doors for installation instructions.

9 Operating Instructions

⚠ WARNING

Fire Risk

- Do not operate fireplace before reading and understanding operating instructions.

Failure to operate fireplace properly may cause fire.

⚠ WARNING

HOT! DO NOT TOUCH.
SEVERE BURNS MAY RESULT.
CLOTHING IGNITION MAY RESULT.

Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers removed.
- Keep clothing, furniture, draperies and other combustibles away.

A. General Information

Fireplaces, as well as other woodburning appliances, have been used safely for many years. It has been our experience that most problems are caused by improper installation and operation of the fireplace. Make certain that installation and operation of the fireplace system is in accordance with these instructions.

It is extremely important that the fire be supervised whenever the fireplace is in use. It is also recommended that an annual inspection be performed on the fireplace system to determine if the flue system needs to be cleaned, or as in the case of any appliance, if minor repairs are required to maintain the system in top operating condition.

⚠ WARNING

Fire Risk

- For use with solid wood fuel or decorative gas appliance only.
- Do not install unvented gas logs.

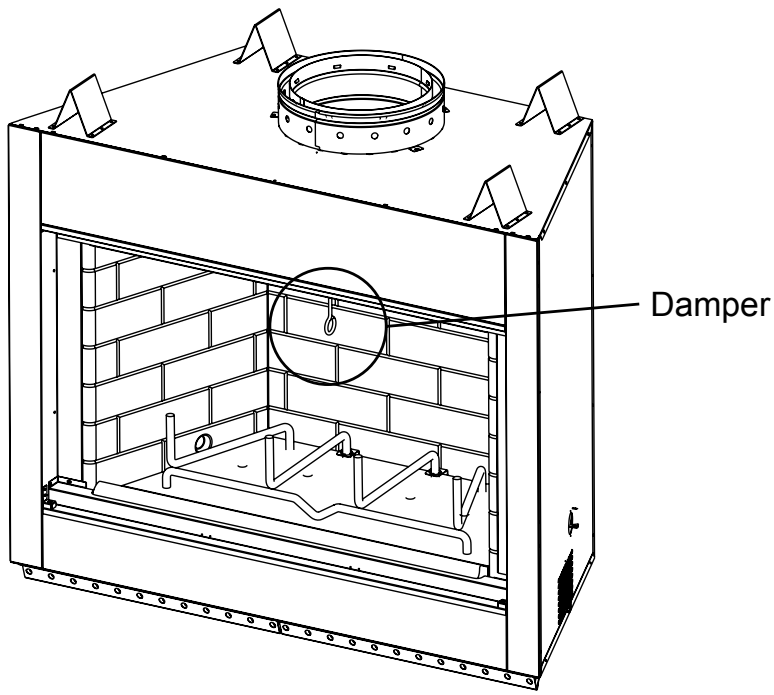


Figure 9.1 General Operating Parts

B. Outside Air

A source of air (oxygen) is required in order for combustion to take place. Whatever air is consumed by the fire must be replaced through cracks around windows, under doors, etc. Most newly constructed houses or existing homes fitted with tightly sealed doors and windows are relatively air tight. In this case, an outside air source must be made available to feed combustion air from outside the home.

An outside air control handle allows you control of the outside air inlet if your fireplace is equipped with this option. Use of outside air for combustion is highly recommended to conserve heated air within the structure and to provide make up air to keep the fireplace venting properly.

This fireplace will operate correctly only if adequate ventilation is provided to allow proper draft to the fireplace system.

See Figure 9.1 for location and operation.

CAUTION

Outside air control handle is HOT. Adjust before lighting fire.

C. Clear Space Near the Fireplace

Combustible materials must not be stored on the hearth extension. Room furnishings such as drapes, curtains, chairs or other combustibles must be at least 4 ft (1.22 m) from the open front of the fireplace.

D. Flue Damper

The flue damper must be in full open position, and is operated by moving the handle up toward the top of the fireplace. Before lighting the fire, verify this by looking up from the inside of the fireplace. Always operate this fireplace with the damper fully open. Please note: Down drafts, obstructions, damaged or poor (wet) fuels can cause smoke spillage.

See Figure 9.1 for location and operation.

⚠ WARNING

Asphyxiation Risk
Fire Risk

- Open damper to operate fireplace.

Closed damper will over-fire fireplace and prevent venting of combustion gases.

E. Firescreen

A firescreen is always provided to control sparks. It must be closed whenever the fireplace is in use. Glass doors or firescreens must not be used to hold burning material inside the fireplace. Only those glass doors specifically tested and listed for use with the specific fireplace model should be used. Screens should be closed when the glass doors are closed.

⚠ WARNING

Fire Risk

- Close firescreen when burning fireplace.
- Do not use firescreen or glass doors to hold burning material in fireplace.

Firescreen controls sparks.

Glass may break or burning material may roll out.

F. Glass Doors

Most efficient fireplace operation using glass doors is with the doors open. When the doors are open the screen must be closed. Only Hearth & Home Technologies glass doors may be used. See Figure 9.2 for proper glass door operation.

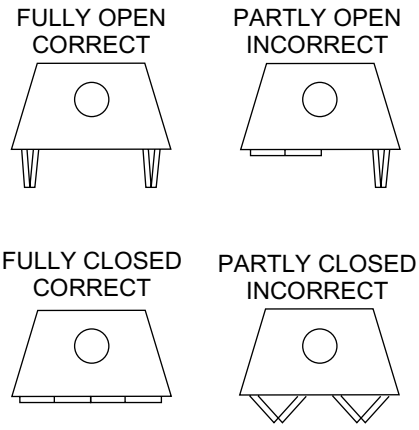


Figure 9.2 Proper Operating Positions of Bi-fold Doors

⚠ WARNING

Fire Risk
Smoke Risk

- Doors must be fully opened or fully closed when operating fireplace.

Partially opened doors may draw flame, smoke or heat from fireplace.

G. Grate

The factory installed integral grate must be used to hold the logs from falling out of an open fireplace and to allow air to pass between the burning logs. It is important to keep the fire off the hearth and to allow the ashes to collect beneath the fire, thereby forming a layer of additional heat protection.

⚠ WARNING

Fire Risk

- Use only factory installed integral grate.

May cause overfire.

H. Wood Fuel

Firewood

Your fireplace performance depends on the quality of the firewood you use. All seasoned wood, regardless of species, contains about 8,000 BTU's per pound, and hardwoods have a greater density than soft woods. A piece of hardwood will contain about 60% more BTU's than an equal size piece of soft wood. Firewood is commonly sold by the cord (128 cu. ft.). A cord of seasoned oak (hardwood) would contain about 60% more potential energy than a cord of seasoned pine (soft wood).

Examples of soft wood trees are Douglas fir, pine, spruce, and cedar, poplar, aspen and alder. Soft woods require less time to dry, burn faster and are easier to ignite than hardwoods.

Examples of hardwood trees are oak, maple, apple, and birch. Hardwoods require more time to season, burn slower and are usually harder to ignite than soft woods.

The best wood fuel is a combination of soft wood and hardwood. Start the fire with soft wood; the fire will give off quick heat to bring the fireplace up to operating temperature, and then the hardwood can be added for slow, even heat and longer burn time.

Moisture

Regardless of which species of wood you burn, the single most important factor that effects the way your fireplace operates is the amount of moisture in the wood. The majority of the problems fireplace owners experience are caused by trying to burn wet, unseasoned wood.

Freshly cut wood can be as much water as it is wood, having a moisture content of around 50%. Imagine a wooden bucket that weighs about eight pounds. Fill it with a gallon of water, put it in the fireplace and try to burn it. This sounds ridiculous but that is exactly what you are doing if you burn unseasoned wood.

Seasoning

Seasoned firewood is nothing more than wood that is cut to size, split and air dried to a moisture content of around 20%. The time it takes to season wood varies from around nine months for soft woods to as long as eighteen months for hardwoods. The key to seasoning wood is to be sure it has been split, exposing the wet interior and increasing the surface area of each piece. A tree that was cut down a year ago and not split is likely to have almost as high a moisture content now as it did when it was cut.

The following guideline will ensure properly seasoned wood:

- Stack the wood to allow air to circulate freely around and through the woodpile.
- Elevate the woodpile off the ground to allow air circulation underneath.
- The smaller the pieces, the faster the drying process. Any piece over 6 in. (152 mm) in diameter should be split.
- Cover the top of the woodpile for protection from rain and snow. Avoid covering the sides and ends completely. Doing so may trap moisture from the ground and impede air circulation.

The problems with burning wet, unseasoned wood are twofold: First, you will receive less heat output from wet wood because it requires energy in the form of heat to evaporate the water trapped inside. This is wasted energy that should be used for heating your home. Secondly, this moisture evaporates in the form of steam which has a cooling effect in your fireplace and chimney system. When combined with tar and other organic vapors from burning wood it will form creosote which condenses in the relatively cool fireplace and chimney.

⚠ WARNING

Fire Risk

- Do NOT burn wet or green wood.
- Store wood in dry location.
- Stack wood so both ends are exposed to air.

Wet, unseasoned wood can cause accumulation of creosote.

⚠ WARNING

Fire Risk

Do NOT store wood:

- Closer than required clearances to combustibles to fireplace.
- Within space required for loading or ash removal.

I. Starting a Fire

Check the flue damper to be certain it is in the full open position. Place crumpled or twisted paper under the fireplace grate. Loosely arrange kindling or small pieces of wood to form a layer above the paper.

The fires must be built on the fireplace grate, without danger of the burning fuel falling out of the fireplace opening.

Light the paper and add small pieces of wood until a hot bed of embers has been established.

After establishing the fire bed, and the small firewood is burning briskly, add a minimum of three average sized pieces of split firewood, place the wood in such a manner to allow combustion air and flames between them.

Note: When first lighting your fireplace, it may be necessary to pre-warm the flue to establish a draft. This is done by holding a rolled up piece of burning newspaper under the flue damper for a few moments. This will help reduce smoke spillage during start-up.

Note: The first three or four fires should be of moderate size to allow the oils and binders to be burned from the fireplace and the refractory and paint to cure. You may notice an industrial odor the first few fires. This is considered normal.

CAUTION

Odors and vapors released during initial operation.

- Curing of high temperature paint.
- Open windows for air circulation.

Odors may be irritating to sensitive individuals.

⚠ WARNING

Fire Risk

Keep combustible materials, gasoline and other flammable vapors and liquids clear of fireplace.

- Do NOT store flammable materials close to the fireplace.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this fireplace.
- Keep all such liquids well away from the fireplace while it is in use.

Combustible materials may ignite.

10 Troubleshooting

Diagnostics and Problem Solving

I can't get a good fire going. What am I doing wrong?

Diagnostic Questions	Possible Causes of Condition	Solutions
Is the damper open?	• No draft	Open damper.
Is there enough paper/starter?	• Insufficient heat to ignite kindling	Use more paper/starter.
Is there enough kindling? Is the kindling dry?	• Insufficient heat to ignite fuel	Use more dry kindling.
Is there enough or too much wood? Is it too large? Is it dry enough?	• Insufficient heat to establish draft • Insufficient air passage • Insufficient surface area • Ignition temperature high due to moisture	Use small split wood that is well seasoned (split, covered on top at least 6 months, preferably a year).
Are there adequate air spaces between fuel pieces?	• Insufficient combustion air and exposed surface area	Arrange kindling and wood for air movement.
Is the chimney pre-warmed?	• Exposed, cold chimney down drafting	Use lighted rolled newspaper at throat or flue opening to start upward movement.
Does the kindling, wood not ignite?	• Condition, amount, arrangement of kindling and fuel	Use more, drier, well-spaced kindling and fuel.
Does the kindling ignite, but the fuel doesn't?	• Amount of kindling • Condition of fuel	Use more kindling; use smaller, dry wood.
Does the fuel ignite, but not burn well?	• Condition of fuel • Draft problem	Use well-seasoned wood and sufficient amount; turn exhaust fans off; open window slightly. Perform Simplified House Pressure Test.

I don't get enough/any heat from the fireplace. What can I do about it?

Diagnostic Questions	Possible Causes of Condition	Solutions
How much wood is used for fire?	• Insufficient fuel	Make larger fires.
How well seasoned is the wood?	• Condition of fuel	Burn seasoned wood: covered on top, split and stacked for 9 months to 2 years.
How much heat output do you expect?	• Unrealistic expectations	Explanation of decorative nature of fireplace; suggestion of approved fireplace insert.

The fireplace burns the wood too fast. What can I do?

Diagnostic Questions	Possible Causes of Condition	Solutions
Do you have glass doors?	• Need to slow air intake	Add glass doors.
What is the condition of the wood?	• Extremely dry wood	Mix in less seasoned wood after fire established.

11 Maintenance and Servicing the Fireplace

A. Disposal of Ashes

Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all embers have thoroughly cooled.

⚠ WARNING

Fire Risk

Disposal of ashes

- Ashes should be placed in metal container with tight fitting lid.
- Do not place metal container on combustible surface.
- Ashes should be retained in closed container until all embers have thoroughly cooled.

⚠ WARNING

Fire Risk

Prevent creosote buildup

- Inspect chimney once every two months during heating season.
- Remove creosote to reduce risk of chimney fire.
- Ignited creosote is extremely HOT.

B. Chimney Inspection/Cleaning

Inspect the chimney internally for obstructions and construction damage. Flue pipe joints and seams must be continuous and mechanically tight.

The chimney should be inspected once every two months during the heating season.

If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

Refer to Figure 11.1 to remove/reinstall termination caps.

C. Firebox Refractory

Check firebox refractory for excessive cracks or gaps. If cracks exceed 1/4 in. (6 mm) in width the refractory should be replaced. See Section 12 for replacement information.

⚠ WARNING

Fire Risk

- Inspect fireplace refractory annually.

Crumbling, deteriorated refractory can allow overheating of surrounding materials.

Note: As you use the fireplace, expansion and contraction will cause minor cracking of the refractory. This is normal, unavoidable, and will not affect the performance of the fireplace. If the cracks become large enough that the metal behind the refractory is exposed or large pieces fall out, the panels should be replaced.

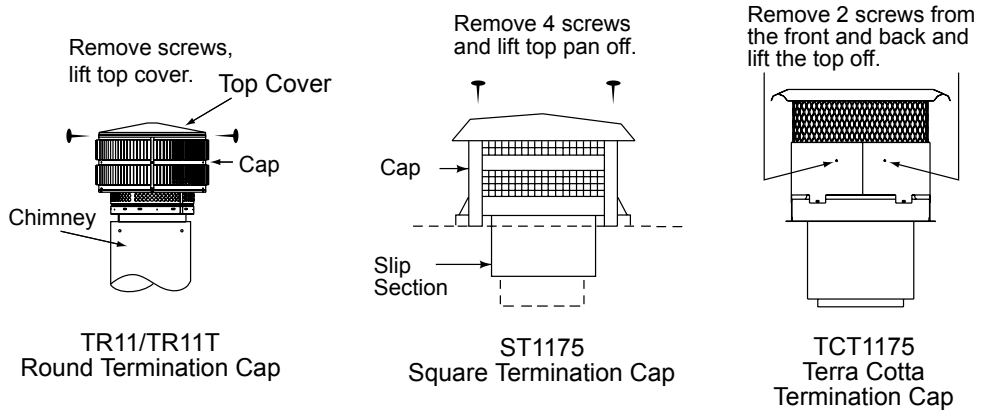


Figure 11.1 Chimney & Termination Cap Cleaning

CAUTION

Handle glass assembly with care.

When cleaning glass door:

- Avoid striking, scratching or slamming glass.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Do NOT clean glass when it is hot.

⚠ WARNING

Fire Risk

- Do not use chimney cleaners or flame colorants in your fireplace.

Will corrode chimney.

⚠ WARNING

Asphyxiation Risk

Fire Risk

Annual inspection by qualified technician recommended.

Check:

- Condition of doors, surrounds and fronts
- Condition of glass and glass assembly
- Obstructions of combustion and ventilation air
- Gas connections and fittings (if present)
- Obstructions of termination cap
- Refractory panels

Clean:

- Glass
- Air passageways, grilles

D. Maintenance Task List

Inspect	Maintenance Tasks
Screens	1. Assess condition of screen and replace as necessary. Screens are required.
	2. Verify maintenance of proper clearance to combustible household objects.
Glass Doors	1. Inspect glass panels for cracks. Replace if this condition is present.
	2. Confirm there is no damage to glass or glass frame. Replace as necessary.
	3. Clean glass using a non-abrasive cleaner such as Brasso©.
Circulation Compartment	1. Remove any foreign objects.
	2. Verify unobstructed air circulation.
Firebox	1. Inspect condition of refractory. Replace if crumbly, deteriorated, or if cracks exceed 1/4 in. (6 mm).
Chimney	1. Inspect for blockage or obstruction such as bird nests, leaves, etc.
	2. Confirm that termination cap remains clear and unobstructed by plants, etc.
	3. Verify that termination cap clearance to subsequent construction (building additions) has been maintained.
	4. Inspect for corrosion or separation.
	5. Verify weather stripping, sealing and flashing remain intact.
	6. Inspect for creosote and remove as needed. (See Sections 10 and 11)
Grate	1. If grate burns out, it should be replaced only with the grate specified on the rating plate and in the replacement parts list for this fireplace.

E. Chimney Fire

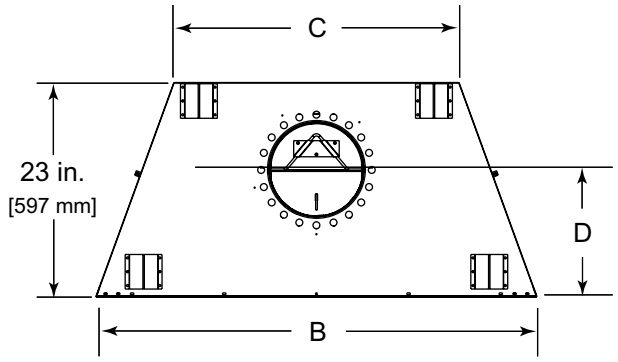
In the event of a chimney fire:

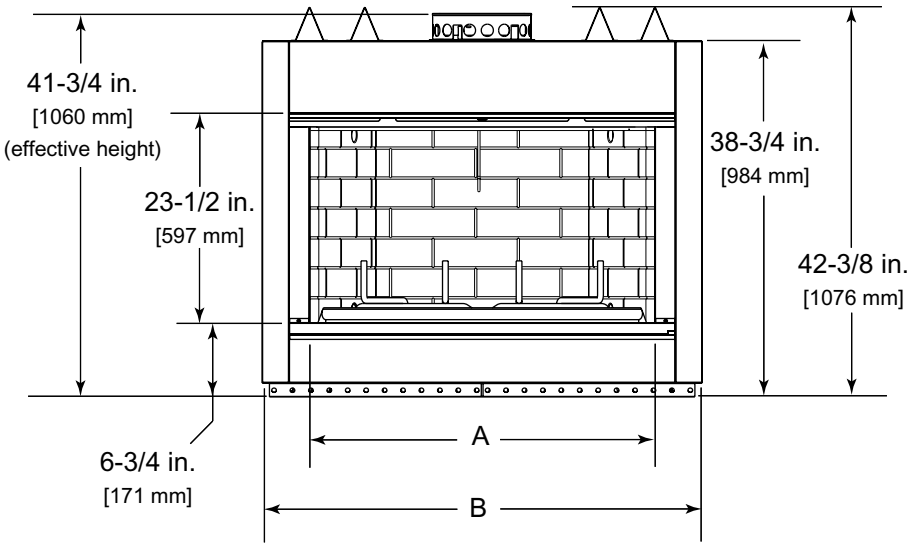
- Have the chimney and adjacent structure inspected by qualified professionals. Hearth & Home Technologies recommends that NFI or CSIA certified professionals, or technicians under the direction of certified professionals, conduct a minimum of an **NFPA 211 Level 2** inspection of the chimney.
- Replace components of the chimney and fireplace as specified by the professionals.
- Ensure all joints are properly engaged and the chimney is properly secured.

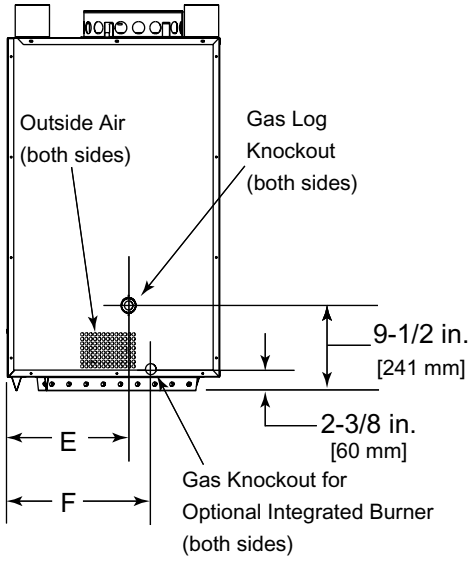
A chimney fire can permanently damage your chimney system. Failure to replace damaged components and make proper repairs creates risk of fire.

12 Reference Materials

A. Fireplace Dimensions



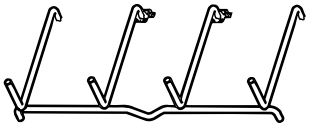




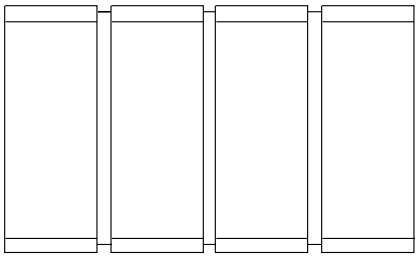
Model	A	B	C	D	E	F
MONTANA-36	36 in.	42 in.	25 in.	13-7/8 in.	13-1/4 in.	15-3/4 in.
	915 mm	1067 mm	635 mm	353 mm	337 mm	400 mm
MONTANA-42	42 in.	48 in.	31 in.	14 in.	14 in.	16-3/4 in.
	1067 mm	1219 mm	787 mm	356 mm	356 mm	425 mm

B. Fireplace Components

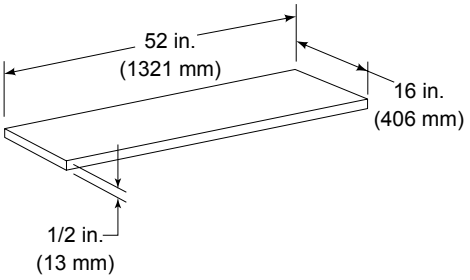
		Description
MONTANA-36	MONTANA-42	Fireplace with Integral Grate, Cooling Air Kit, Traditional Brick Refractory and Hearth Protection Strips
MONTANA-36H	MONTANA-42H	Fireplace with Integral Grate, Cooling Air Kit, Herringbone Pattern Refractory and Hearth Protection Strips
DM1836S	DM1842S	Bi-fold Glass Doors, Clear-View - Stainless Steel
HX3	HX4	Hearth Extension
	WC42S	Weather Cover - Stainless Steel
GR33	GR21	Integral Grate (included with fireplace)
		Building Set Enclosure
	OGL-42	Outdoor Gas Log (natural or propane gas)



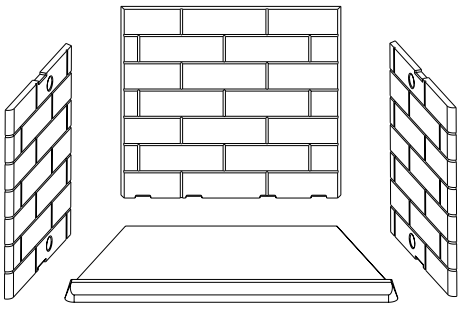
GR21 & GR33
Integral Grate



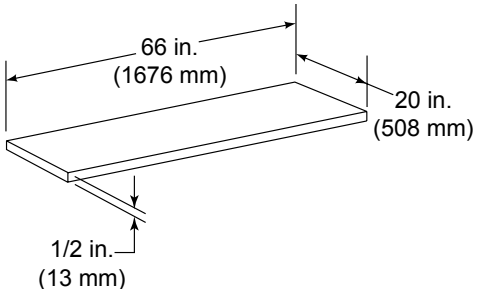
Bi-fold Glass Doors



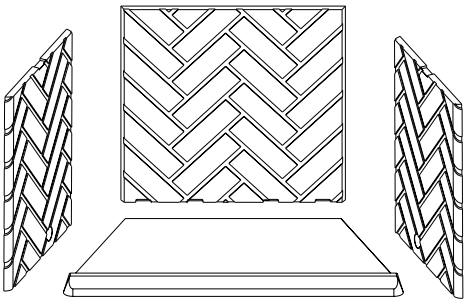
HX3 Hearth Extension



Herringbone Pattern Refractory



HX4 Hearth Extension



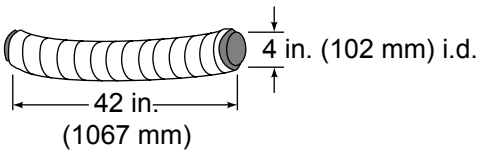
Traditional Brick Pattern Refractory

C. Chimney Components

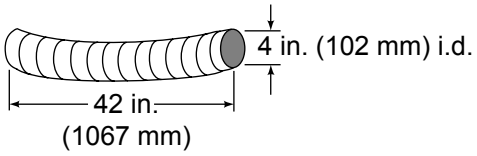
The following pictures show only those chimney components which may be safely used with this fireplace.

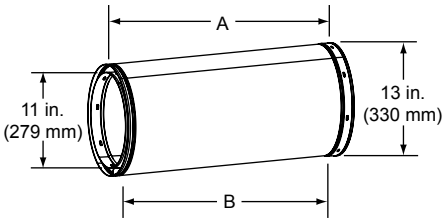
Catalog #	Description
CAK5A	Chimney Air Kit
ID4	Insulated Duct/Outside Air
UD4	Uninsulated Duct/Outside Air
SL1106	Chimney Section - 6 in. (152 mm) long
SL1112	Chimney Section - 12 in. (305 mm) long
SL1118	Chimney Section - 18 in. (457 mm) long
SL1136	Chimney Section - 36 in. (914 mm) long
SL1148	Chimney Section - 48 in. (1219 mm) long
SL11	Chimney Stabilizer
SL1130	Chimney Offset/Return - 30 deg
FS538	Ceiling Firestop - Straight
FS540	Ceiling Firestop - 30 deg
AS10	SL1100 Straight Attic Insulation Shield, 24 in. (610 mm)
JB577	Chimney Joint Band
CB576	Chimney Bracket
RF570	Roof Flashing - Flat to 6/12 Pitch
RF571	Roof Flashing - 6/12 to 12/12 Pitch
TR11	Round Termination Cap
TR11T	Round Telescoping Termination Cap
TCT1175	Terra Cotta Termination Cap
ST1175	Square Termination Cap
CT56	Chase Top
LDS33	Decorative Shroud - 3 ft x 3 ft (.91 m x .91 m)
LDS46	Decorative Shroud - 4 ft x 6 ft (1.22 m x 1.83 m)
LDS-BV	Decorative Shroud - 26 in. x 26 in. (660 mm x 660 mm)
	Field Constructed Shrouds (See “Woodburning Termination Cap”)

ID4 Insulated Duct



UD4 Uninsulated Duct

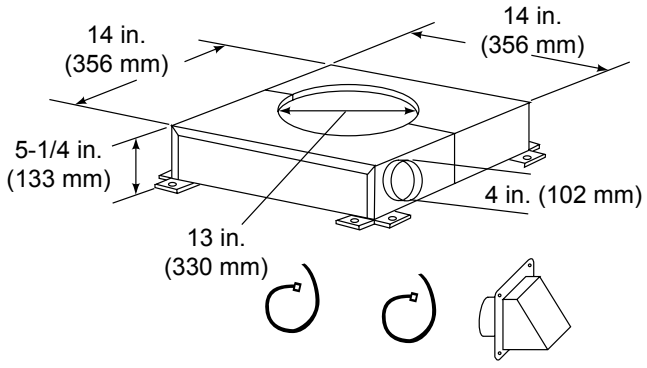




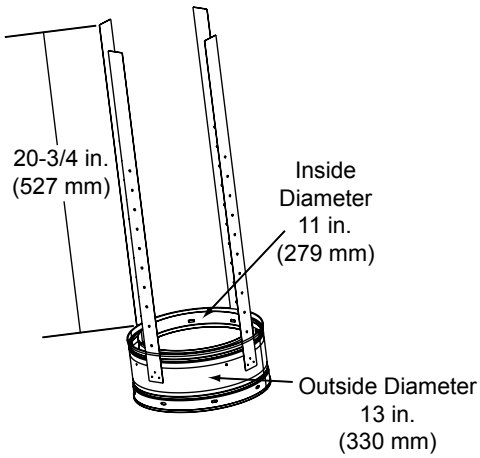
Chimney Sections

Catalog #	A		B	
	in	mm	in	mm
SL1106	6	152	4-3/4	121
SL1112	12	305	10-3/4	273
SL1118	18	457	16-3/4	425
SL1136	36	914	34-3/4	883
SL1148	48	1219	46-3/4	1187

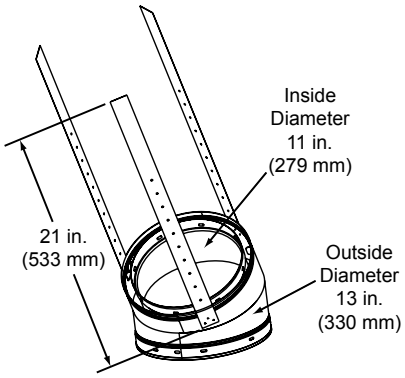
A = Actual Length
B = Effective Length (length of chimney part after it has been snapped to another)



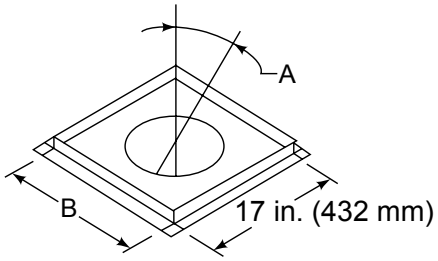
CAK5A Chimney Air Kit



SL11 Chimney Stabilizer

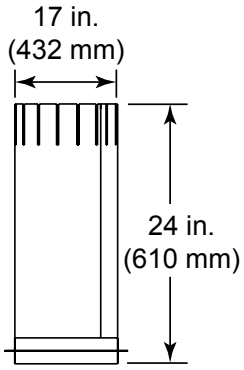


SL1130 Offset/Return

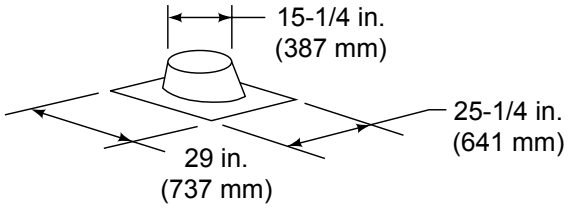


Ceiling Firestop

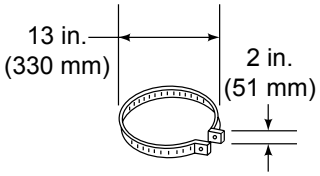
Catalog #	A	B	
FS538	0-deg.	17 in.	432 mm
FS540	30-deg.	26 in.	660 mm



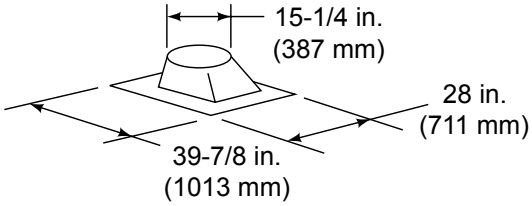
AS10 Straight Attic Insulation Shield



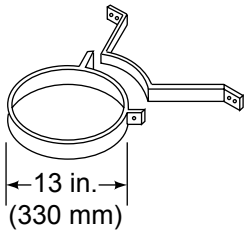
RF570 Roof Flashing



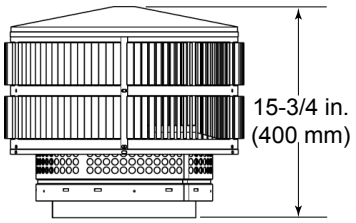
JB577 Chimney Joint Band



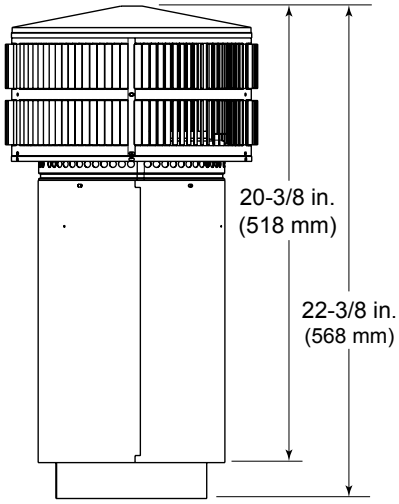
RF571 Roof Flashing



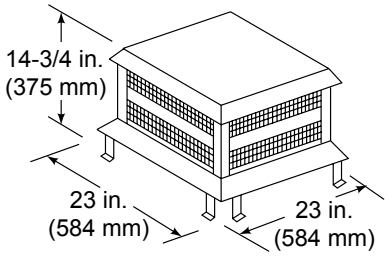
CB576 Chimney Joint Band



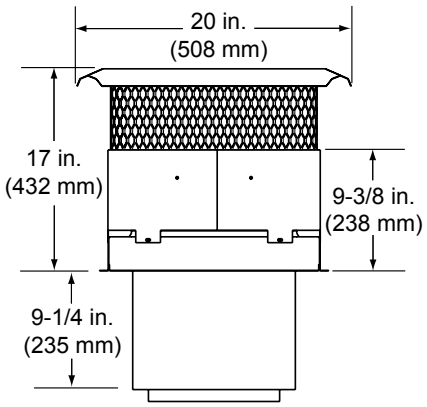
TR11 Round Termination Cap



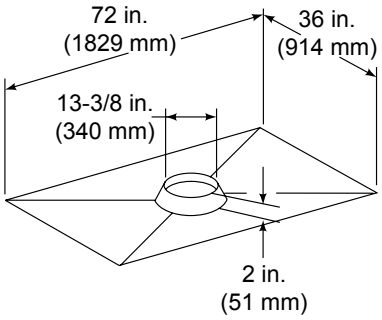
TR11T Round Telescoping Termination Cap



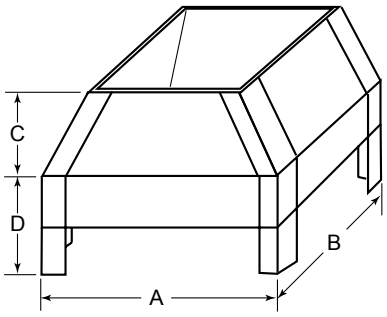
ST1175 Square Termination Cap



TCT1175 Terra Cotta Cap

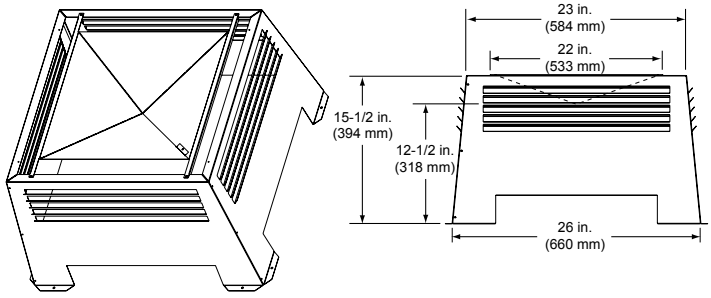


CT56 Chase Top



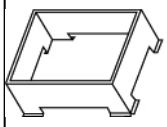
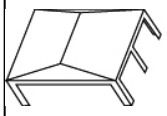
LDS33/LDS46 Decorative Shroud

Catalog #	A		B		C		D	
	in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*
LDS33	36	914	36	914	8-1/2	216	11	279
LDS46	48	1219	72	1829	8-1/2	216	11	279



LDS-BV Decorative Shroud

Woodburning Termination Cap

Shroud	TS345/T445 (Top Vent)	TR342/TR344 TR442/TR444	TV342 TR342/TR344* TR442/TR444* (* with TR-TVK installed)	TR11/TR11T	TV11/TV11T TR11/TR11T* (* with TR-TVK installed)
	**OPEN TOP** with solid sides and 3 in. (76 mm) opening at the bottom				
Mnimum Base Dimensions	23 in. x 23 in. (584 x 584 mm)	28 x 28 in. (711 x 711 mm) with Radiation Shield	26 x 26 in. (660 x 660 mm)	32 x 32 in. (813 x 813 mm) with Radiation Shield	26 x 26 in. (660 x 660 mm)
Minimum Top Dimensions	20 x 20 in. (508 x 508 mm)	25 x 25 in. (635 x 635 mm)	23 x 23 in. (584 x 584 mm)	29 x 29 in. (737 x 737 mm)	23 x 23 in. (584 x 584 mm)
	MAILBOX STYLE with open ends and 3 in. (76 mm) opening at the bottom of the sides.				
Minimum Base Dimensions	N/A	26.5 x 28 in. (673 x 711 mm) with Radiation Shield	28 x 30 in. (711 x 762 mm)	34 x 34 in. (864 x 864 mm) with Radiation Shield	28 x 30 in. (711 x 762 mm) with Radiation Shield or 34 x 34 in. (864 x 864 mm)
Minimum Height	N/A	28 1/4 in. (718 mm)	27 1/2 in. (699 mm)	28 1/4 in. (718 mm)	27 1/2 in. (699 mm)
	**ROOFED STYLE** with **12 x 22 in. (264 sq. in.) (305 x 559 mm)** opening on each side and 3 in. (76 mm) space between the radiation shield and chase top.				
Minimum Base Dimensions	N/A	27 x 27 in. (686 x 686 mm) with Radiation Shield	27 x 27 in. (686 x 686 mm) with Radiation Shield	34 x 34 in. (864 x 864 mm) with Radiation Shield	34 x 34 in. (864 x 864 mm) with Radiation Shield
Minimum Height	N/A	23 in. (584 mm)	23 in. (584 mm)	23 in. (584 mm)	23 in. (584 mm)

Minimum Height is measured from the bottom of the termination cap:
Minimum height is established with the bottom of the termination cap 7 in. (178 mm) above the chase top. Minimum height must increase accordingly for any height above 7 in. (178 mm).

All dimensions are INSIDE dimensions.

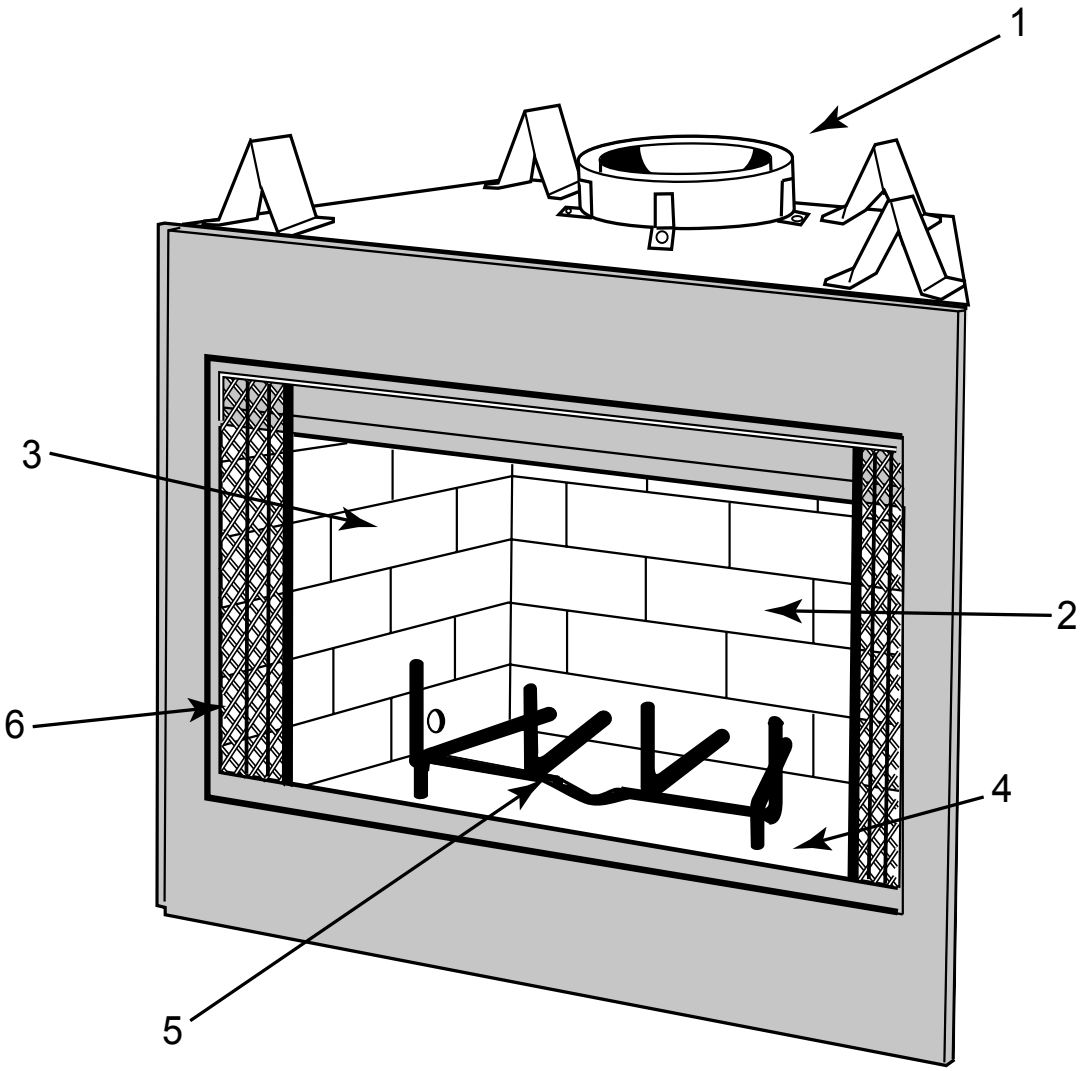
HEAT&GLO LifeStyle Collection™

Service Parts

MONTANA SERIES

Exploded Parts Diagram
Outdoor Woodburning Fireplace

Beginning Manufacturing Date: 9/8/03
Ending Manufacturing Date: Active



Service Parts List
Outdoor Woodburning Fireplace

Beginning Manufacturing Date: 9/8/03
Ending Manufacturing Date: Active

#	Description of Part	MONTANA-36	MONTANA-42	Qty. req.
1	Starter Collar	30399	30399	1
2	Traditional Back Refractory	29992	28394	1
3	Traditional Side Refractory	28393	28393	2
4	Traditional Hearth Refractory	29993	28391	1
	Herringbone Back Refractory	4010-016	4010-015	1
	Herringbone Right Side Refractory	4010-013	4010-013	1
	Herringbone Left Side Refractory	4010-014	4010-014	1
	Herringbone Hearth Refractory	4010-019	4010-020	1
5	Grate	GR33	GR21	1
6	Rod w/Screen Assembly	4039-018	30371	2
	Damper Assembly	34454	34454	1
	Door Clips	30407	30407	2
	Door Pivet Clip	31527	31527	2
	Firescreen Rod	4039-120	31375	2
	Gas Tube	4039-116	30412	1
	Hearth Filler - pre Serial #AK560843	4039-102	30405	1
	Hearth Cover - Stainless Steel - post Serial #AK560842	4039-108	30403	1
	Smoke Shield	4039-106	30402	1
	Top Door Track	4039-118	30400	1
	Top Stand Off	13433	13433	4
	Upper Front Face	4039-114	30395	1
	Bottom Front Face	4039-113	30393	1
	Herringbone refractory available post week 3/04			

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E. Limited Warranty

HEAT & GLO™

Where everything comes together

WARRANTY
FOR HEAT & GLO FIREPLACES

The limited warranty will not become effective until you have mailed the completed warranty card to:

Hearth & Home Technologies Inc.
20802 Kensington Blvd., Lakeville, MN 55044.

This card must be mailed within 60 days of the fireplace installation.

Subject to the conditions set forth herein, HEARTH & HOME TECHNOLOGIES INC. (HHT) extends the following limited warranty with respect to your Heat & Glo fireplace, excluding accessories, chimney components and glass doors.

If HHT is satisfied that any part or portion of the fireplace covered by this warranty is defective in material or workmanship under normal use and service as described in the operating instructions, HHT will take the following actions:

1. Within the first five (5) years from the date of installation, HHT shall, at its option, replace or repair any such defect in material or workmanship, at HHT's expense. HHT SHALL NOT BE RESPONSIBLE FOR ANY OTHER LABOR COSTS, OR EXPENSES, INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.
2. During the sixth (6th) through the (10th) years after the date of installation, HHT shall supply replacement parts or parts at no charge, but SHALL NOT BE RESPONSIBLE FOR ANY LABOR, TRANSPORTATION, OR OTHER INDIRECT DAMAGES.
3. During the eleventh (11th) through the fifteenth (15th) years after date of installation, HHT will send to you, FOB its factory, replacement parts (if available) at the current minimum wholesale price, but HHT SHALL NOT BE RESPONSIBLE FOR ANY LABOR, TRANSPORTATION OR OTHER INDIRECT DAMAGES.
4. During the first six (6) months after installation, HHT shall, at its option, replace or repair the glass doors and any electrical components, if operation is faulty. (This does not include glass panels broken during shipment, misuse or careless handling.) After the first six (6) months, HHT will sell to you, FOB its factory, replacement parts at the current list price, but HHT SHALL NOT BE RESPONSIBLE FOR ANY LABOR, TRANSPORTATION OR OTHER INDIRECT DAMAGES. IF GLASS DOORS OTHER THAN FACTORY DOORS ARE USED ALL WARRANTY AND LIABILITY ON THE FIREPLACE IS VOIDED.

HHT may discharge its entire warranty liability by refunding the price of the product.

Products made by other manufacturers, sold with the fireplace or thereafter are not covered by this limited warranty.

This limited warranty will be void if the fireplace is not installed according to the installation instructions. The limited warranty also is void if the fireplace is not operated, at all times, according to the operating instructions furnished. The limited warranty will also be void if the fireplace is removed from the place originally installed.

EXCEPT TO THE EXTENT PROVIDED BY LAW, NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND NO IMPLIED WARRANTIES SHALL APPLY TO THE FIREPLACE AFTER THE ABOVE LIMITED WARRANTY HAS EXPIRED.

In states that do not allow limitations on how long implied warranty lasts, or do not allow exclusion of indirect damages, those limitations or exclusions may not apply to you. You may also have additional rights not covered in this limited warranty.

HHT reserves the right to make changes at anytime, without notice, in design, material, specifications and prices and the right to discontinue styles and products.

Feb 2006

F. Contact Information

HEAT & GLO™

Where everything comes together

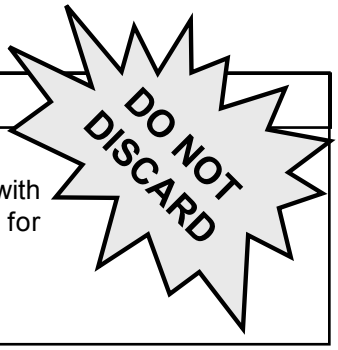
Please contact your Heat & Glo dealer with any questions or concerns. For the number of your nearest Heat & Glo dealer, please call 1-888-427-3973.

– NOTES –

CAUTION

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.